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"The objects of the American Institute of Electrical Engineers are to promote the Arts and Sciences connected with the production and utilization of electricity, and the welfare of those employed in these industries; by means of meetings for social intercourse, the reading and discussion of professional papers, and the circulation, by means of publications among its members and associates, of the information thus obtained"

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5 BEEKMAN STREET,
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In 1884, the American Institute of Electrical Engineers was organized in New York City, with the following purpose as stated in the rules:

The objects of the American Institute of Electrical Engineers are to promote the Arts and Sciences connected with the production and utilization of electricity, and the welfare of those employed in these industries; by means of meetings for social intercourse, the reading and discussion of professional papers, and the circulation, by means of publications among its members and associates, of the information thus obtained.

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EDISON, THOMAS A.	Electrician and Inventor, Orange, N. J.	A April 15, 1884 M Oct. 21, 1884
FARNHAM, ISAIAH H.	Electrician for the N. E. Telephone & Telegraph Co., 50 Pearl St., Boston, Mass.	A June 8, 1887 M July 12, 1887
FIELD, C. J.	General Manager and Engineer of Edison Electric Illuminating Co. of Brooklyn. 358–362 Pearl St., Brooklyn, N. Y.	A June 8, 1887 M Nov. 1, 1887
FIELD, STEPHEN D.	Electrician and Inventor, Stockbridge, Mass.	A April 15, 1884 M Oct. 21, 1884
FITCH, D. H.	President, The Fitch Battery and Electric Co., Cazenovia, N. Y.	A Sept. 3, 1889 M Oct. 1, 1889
FLEMING, W. H.	Care of Electric Club, New York.	A Dec. 6, 1887 M Jan. 3, 1888
FOSTER, HORATIO A.	Electrical Engineer, 23 East Twenty-fourth St., New York.	A June 8, 1887 M Sept. 6, 1887
FREEMAN, DR. FRANK L.	Attorney-at-Law, Solicitor of Patents, Electrical Expert, 931 F St., Washington, D. C.	A May 7, 1889 M Sept. 3, 1889
GARRATT, ALLAN V.	Secretary and Treasurer of the National Electric Light Association, 18 Cortlandt St., New York.	A April 2, 1889 M May 7, 1889
GARVER, M. M.	645 High St., Newark, N. J.	A July 10, 1888 M Sept. 3, 1889
GEYER, PROF. WM. E.	(*Manager*). Stevens Institute of Technology, Hoboken, N. J.	A June 5, 1888 M Sept. 7, 1888
GISBORNE, HARTLEY, *C. E.*	District Superintendent and Electrician, Government Telegraph Service of Canada, Qu'Appelle Station, Assa., N. W. Territory, Canada.	A Dec. 9, 1884 M May 17, 1887
GREEN, DR. NORVIN	(*Past President*). Pres't Western Union Telegraph Co., 195 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884
HALL, CLAYTON C.	Civil Engineer, 810 Park Ave., Baltimore, Md.	A April 15, 1884 M Oct. 21, 1884
HAMBLET, JAMES	Manager Time Service, W. U. Tel. Co., 195 Broadway, P. O. Box 3393, New York.	A Nov. 1, 1887 M Dec. 6, 1887

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Name.	Address.	Date of Membership.
HAMILTON, GEO. A.	Electrician, Western Electric Co., 22 Thames cor. Greenwich St., New York.	A April 15, 1884 M Oct. 21, 1884
HAMMER, W. J.	Electrical Engineer, 23 Rowland St., Newark, N. J.	A June 8, 1887 M July 12, 1887
HASKINS, CHARLES H.	Electrician, care of New York Club, Fifth Ave. and Thirty-fifth St., New York.	A April 15, 1884 M Oct, 21, 1884
HAZARD, COL. ROWLAND R.	N. Y. District Railway Co., 120 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884
HAYNES, F. T. J.	Divisional Telegraph Engineer, Great Western Railway, Taunton, Eng.	A Dec. 6, 1888 M Jan. 3, 1887
HERING, CARL	Consulting Electrical Engineer, 3816 Spring Garden St., Philadelphia, Pa.	A Jan. 3, 1888 M June 5, 1888
HERZOG, DR. F. BENEDICT	(*Manager*) President Herzog Teleseme Co., 30 Broad St., New York.	A May 24, 1887 M July 12, 1887
HIGGINS, EDWARD E.	Electrical Engineer, 202 Main St., Buffalo, N. Y.	A June 8, 1887 M July 12, 1887
HOUSTON, PROF. EDWIN J.	1521 Mt. Vernon St., Philadelphia, Pa.	A April 15, 1884 M Oct. 21, 1884
HOWELL, JOHN W.	(*Manager*). Electrician, Edison Lamp Co., Harrison N. J.	A July 12, 1887 M June 5, 1888
HUNTER, RUDOLPH M.	Mechanical and Elect'al Engineer, 926 Walnut St., Philadelphia, Pa.	A July 13, 1886 M May 17, 1887
HYDE, JEROME W.	Springfield, Mass.	A June 8, 1887 M Nov. 1, 1887
JENKS, W. J.	Technical Department, United Edison Manufacturing Co., 65 Fifth Ave., New York.	A June 8, 1887 M Nov. 1, 1887
JOHNSON, E. H.	President, Sprague Electric Railway & Motor Co., 16 Broad St., New York.	A Feb. 7, 1888 M May 1, 1888
JONES, FRANCIS W.	Assistant Gen'l-Manager and Electrician, Postal-Telegraph Cable Co., 187 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884
KNOWLES, E. R.	Electrical Engineer, 430*a* Waverly Ave., Brooklyn, N. Y.	A June 8, 1887 M July 12, 1887
KNUDSON, A. A.	Electrician, Care of American Institute of Electrical Engineers, 5 Beekman St., New York.	A Dec. 6, 1887 M Jan. 3, 1888
LANGE, PHILIP A.	Superintendent of Detail Department, Westinghouse Electric Co., Pittsburgh, Pa.	A Mar. 6, 1888 M June 5, 1888
LANGTON, JOHN	General Manager, Canadian Edison M'f'g Co., Sherbrooke, P. Q.	A Mar. 6, 1888 M June 5, 1888
LATTIG, J. W.	Sup't Telegraph, Lehigh Valley R. R., South Bethlehem, Pa.	A June 8, 1887 M July 12, 1887
LEONARD, H. WARD	General Manager, United Edison Manufacturing Co., 65 Fifth Ave., New York.	A July 12, 1887 M Sept. 6, 1887
LEONARD, M. B.	Electrical Engineer, and Supt. of Telegraph, Chesapeake & Ohio R'y. Co, Richmond, Va.	A Nov. 6, 1886 M May 1, 1888

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Name.	Address.	Date of Membership.
LEVER, CHARLES	Electric Light Engineer, Bowdon, Cheshire, Eng.	A Dec. 6, 1887 M Jan. 3, 1888
LIEB, JOHN W., JR.	Chief Engineer, Società Generale Italiana di Elettricita (Sistema Edison). Via S. Radigonda N. 4, Milan, Italy.	A Sept. 6, 1887 M Nov. 1, 1887
LOCKWOOD, THOMAS D.	(*Manager*). Electrical Engineer, and Advisory Electrician. P. O., Drawer 2, Boston, Mass.	A April 15, 1884 M Oct. 21, 1884
LYNE, LEWIS F.	Mechanical and Elect'al Engineer, 307 Grove St., Jersey City, N. J.	A Jan. 3, 1888 M June 5, 1888
MARKS, WILLIAM DENNIS,	*Ph. B., C. E.* Engineer-in-Chief, Edison General Electric Co., 44 Wall St., New York.	A Feb. 7, 1888 M May 1, 1888
MAYNARD, GEO. C.	Electrical Engineer, 1409 New York Ave., Washington, D. C.	A April 15, 1884 M Dec. 9, 1888
MICHAELIS, OTHO ERNEST,	*Ph. D.* (*Vice-President*). Major of Ordnance, U. S. Army, Commanding Kennebec Arsenal, Augusta, Me.	A Dec. 9, 1884 M Jan. 6, 1885
MILLIS, JOHN	Lieutenant of Engineers, U. S. Army, P. O. Box 2128, New York.	A July 7, 1884 M Mar. 3, 1885
MILLS, F. P.	Superintendent Cleveland Iron Mining Co., Ishpeming, Mich.	A Jan. 6, 1885 M Mar. 3, 1885
NICHOLS, EDWARD L.	(*Vice-President*). Professor of Physics at Cornell University, Ithaca, N. Y	A Oct. 4, 1887 M Dec. 6, 1887
PAINE, SIDNEY B.	Electrical Constructor, member of firm "Paine & Francis," 38 Pearl St., Boston, Mass.	A June 8, 1887 M Nov. 1, 1887
PARKS, C. WELLMAN	Electrician, 1825 Fifth Ave., Troy, N. Y	A July 12, 1887 M May 1, 1888
PATTEN, F. JARVIS,	Consulting Electrical Engineer, 47 Barclay St., New York.	A Sept. 6, 1887 M Nov. 1, 1888
PFANNKUCHE, GUSTAV	Engineer and Inventor, Cleveland, O.	A Feb. 7, 1888 M May 1, 1888
POPE, FRANKLIN L.	(*Past President*). Expert for Westinghouse Electric Co., Elizabeth, N. J.	A April 15, 1884 M Oct. 21, 1884
PORTER, J. F.	Pres't and Gen'l Manager, Central Electric Construction Co. and Pres't, Southern Elec. Supply Co. 919 Spruce St., St. Louis, Mo.	A Sept. 6, 1887 M Nov. 1, 1887
PRATT, J. HOWARD	Professor of Physics, Jacksonville, Ill.	A June 5, 1888 M Sept. 7, 1888
PRATT, ROBERT J.	Electrician. Manager, Electric M'f'g Co., Troy, N. Y.	A July 12, 1887 M Sept. 6, 1887
PRESCOTT, GEO. B., JR.	(*Manager*). Electrical Engineer, Electrician to Electrical Accumulator Co., 44 Broadway, New York.	A July 12, 1887 M Nov. 1, 1887
RAYMOND, CHAS. W.	Civil and Electrical Engineer, 36 Dearborn St., Chicago, Ill.	A June 8, 1887 M May 17, 1887
RECKENZAUN, ANTHONY	Electrical Engineer, 7 Albert Terrace, Hemberton Road, Stockwell, London, S. W. England.	A Nov. 1, 1887 M Dec. 6, 1887

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Name.	Address.	Date of Membership.
MACKENZAUN, FREDERICK,	Electrician, 220 Sutter St., San Francisco, Cal.	A Mar. 6, 1888 M June 5, 1888
RICE, E. WILBUR, JR.	General Superintendent and Consulting Electrician, Thomson-Houston Elec. Co., Lynn, Mass.	A Dec. 6, 1887 M Jan. 3, 1888
RIES ELIAS E.	Electrician and Electrical Engineer, 430 South Broadway, Baltimore, Md.	A July 12, 1887 M Sept. 6, 1887
ROBERTS, E. P.	Electrician and Sup't, Swan Lamp Co., Belden St., Cleveland, O.	A Jan. 6, 1885 M Feb. 3, 1885
ROHRER, ALBERT L.	Electrical Engineer, with Thomson-Houston Electric Co., Lynn, Mass.	A Nov. 1, 1887 M May 1, 1888
SALOMONS, *Sir* DAVID LIONEL, *Bart. M. A.*.	Engineer and Barrister, Broomhill, Tunbridge Wells, Kent and 40 Grosvenor St., London, W., England.	A Feb. 7, 1888 M May 1, 1888
SCHLESINGER, WM. M.	Electrician of Schlesinger, Kimball & Co., Manufacturers of Electric Mining Machinery, 228 West Broad St., Columbus, O.	A Nov. 1, 1887 M Dec. 6, 1887
SHALLENBERGER, O. B.	Electrician, Westinghouse Electric Co., Pittsburgh, Pa.	A Sept. 7, 1888 M Dec. 4, 1888
SLATER, HENRY B.	Electrical Engineer and Electro Metallurgist, Leadville, Col.	A April 15, 1884 M Dec. 9, 1884
SMITH, HERBERT G.	General Electrician, Quezaltenango, Guatémala.	A Mar. 6, 1888 M June 5, 1888
STANDFORD, WILLIAM	Ass't Sup't Telegraphs, Colonial Gov't, Cape Town, Cape of Good Hope, Africa.	A Oct. 4, 1887 M Dec. 6, 1887
STIFRINGER, LUTHER	Electrical Expert, 44 Wall St., Room 71, New York.	A June 8, 1887 M Nov. 1, 1887
STUMP, CLARENCE E.	Bus. M'g'r and Treas'r, The W. J. Johnston Co., Ltd., Publishers of the *Electrical World*, 167–177 Times Building, New York.	A May 17, 1887 M May 17, 1887
TERRY, CHARLES A.	Lawyer, Westinghouse Electric Co, Pittsburgh, Pa.	A April 5, 1887 M May 17, 1887
THURNAUER, ERNST	Chief Engineer, Thomson-Houston International Elec. Co, Michaelisbrücke, Hamburg, Germany.	A Oct. 14, 1887 M Dec. 6, 1887
TROWBRIDGE, PROF. W. P.	School of Mines, Columbia College New York.	A April 15, 1884 M Oct. 21, 1884
TURNER, WILLIAM S.	Electrical Engineer, Woodbridge & Turner, 74 Cortlandt St., New York.	A Dec. 7, 1886 M Oct. 2, 1888
VAIL, J. H.	Electrical Engineer, Ass't to the Pres't, Sprague Electric Railway & Motor Co. 16 Broad St., New York.	A June 8 1887 M Nov. 1, 1887
VAIL, THEO. N.	President, Metropolitan Telephone & Telegraph Co., 18 Cortlandt St., New York.	A April 15, 1884 M Oct. 21, 1884
VAN DEPOELE, CHARLES J.	Electrician, Electrical Railway Department, Thomson-Houston Electric Co., Lynn, Mass.	A June 5, 1888 M Sept. 7, 1888

Name.	Address.	Date of Membership.
VANSIZE, WILLIAM B.	Solicitor of Patents, 44 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884
WADDELL, MONTGOMERY	Engineer, The Edison Machine Works, Schenectady, N. Y.	A Feb. 7, 1888 M May 1, 1888
WALKER, SYDNEY F.	Electrical Engineer, 195 Severn Road, Cardiff, England.	A June 2, 1885 M May 17, 1887
WALDO, DR. LEONARD	Electrical Engineer, The Aluminum Brass & Bronze Co., Bridgeport, Conn.	A June 5, 1888 M Dec. 4, 1888
WEAVER, W. D.	Assistant Engineer, U. S. N., New York Navy Yard.	A May 17, 1887 M May 17, 1887
WEEKS, EDWIN R.	General Manager, Kansas City Electric Light Co., National Bank of Kansas City Building. Kansas City, Mo.	A Sept. 6, 1887 M Nov. 1, 1887
WESTON, EDWARD	(*Past President* and *Vice-President*). Electrician, 645 High St., Newark, N. J.	A April 15, 1884 M Oct. 21, 1884
WETZLER, JOSEPH	(*Manager*). Editor *The Electrical World*. Times Building, New York	A April 15, 1884 M Dec. 9, 1884
WHARTON, CHAS. J.	82 Bond St., London England.	A Jan. 3, 1888 M May 1, 1888
WHEELER, SCHUYLER S., *Sc.D.*	(*Manager*). President Crocker-Wheeler Electric Motor Co., 322 Seventh Ave., Electrical Expert, Board of Electrical Control, 1266 Broadway, New York.	A June 2, 1885 M Sept. 1, 1885
WILSON, FREMONT	Electrician. 293 Lenox (6) Ave., New York.	A Mar. 6, 1888 M June 5, 1888
WINCHESTER, A. E.	Designer of Steam Electrical Plants, Wilton, Conn.	A June 8, 1887 M Nov. 1, 1887
WOODBRIDGE, J. L.	Electrical Engineer. Woodbridge & Turner, 74 Cortlandt St., New York.	A June 8, 1887 M Nov. 1, 1887
ZETSCHE, DR. CARL EDUARD,	Telegraph Engineer, N. Tieckstrasse 7, Dresden, Saxony.	A Nov. 1, 1887 M Jan. 3, 1888

Members, - - - 133.

ASSOCIATE MEMBERS.

Name.	Address.	Date of Membership.
ABERNETHY, J. P.	Superintendent of Telegraph, 53 City Hall, Cleveland, O.	July 7, 1884
ADAMS, H. C.	New York Agent, Fort Wayne Jenney Electric Light Company, 115 Broadway, New York.	April 15, 1884
ANDERSON, ALEXANDER	Superintendent and Manager of the Thomson-Houston Electric Co., Norfolk, Va.	Sept. 6, 1887
ANDREWS, WM. S.	Vice-President, Leonard & Izard Co., 425, The Rookery, Chicago, Ill.	Mar. 5, 1889
BACKSTROM, CHAS. A.	Manufacturer of Electric Incandescent Lamps, 12 Jacob St., New York.	Nov. 13, 1888
BARTON, ENOS M.	President Western Electric Co., 227 South Clinton St., Chicago, Ill.	July 12, 1887

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Name.	Address.	Date of Membership.
BARRETT, JOHN A.	Electrician, 18 Cortlandt St., New York.	June 8, 1887
BATES, D. H.	Vice-President and Gen'l Manager, The Electrical Accumulator Co., 44 Broadway, New York.	April 15, 1884
BEATTIE, JOHN, JR.	Manager and Superintendent, The Beattie Battery, Zinc and Electric Co., Fall River, Mass	Sept. 6, 1887
BAYLES, ROBERT N.	Electrician, The "C & C" Electric Motor Co., 404 Greenwich St., New York.	Oct. 1, 1889
BERHGOLTZ, HERMAN	Mechanical Draughtsman, Thomson-Houston Electric Co., Lynn, Mass.	April 2, 1889
BERLINER, EMILE	Inventor, Columbia Road, between Fourteenth and Fifteenth Sts., Washington, D. C.	April 15, 1884
BLACKWELL, R. W.	Civil and Electrical Engineer, 27 Tenth Ave., New York.	July 7, 1884
BLAKE, HENRY W.	Agent, Sprague Electric Railway & Motor Co., 16 Broad St., New York.	Nov. 13, 1888
BLOOD, W. HENRY, JR.	Electrical Engineer, Thomson-Houston Electric Co., Lynn, Mass.	April 2, 1889
BOGART, A. LIVINGSTON	Electrical and Patent Expert, 22 Union Square, New York,	July 10, 1888
BOTTOMLEY, HARRY	Electrical Engineer, Thomson-Houston Electric Co., Lynn, Mass.	April 2, 1889
BOYNTON, EDWARD C.	General Superintendent and Electrician, Robinson-Foster Electric Co., Peabody, Mass.	Aug. 6, 1889
BRACKEN, WILLIAM	President, The Julien Electric Company, 120 Broadway, New York.	May 24, 1887
BRACKETT, PROF. CYRUS F.	Princeton, N. J.	April 15, 1889
BRADY, PAUL F.	Superintendent, Central N. Y. Telephone & Telegraph Co., Cooperstown, N. Y.	July 12, 1887
BRINER, C. J.	Vice-President, Central Electric Construction Co., 919 Locust St., St. Louis, Mo.	April 2, 1889
BROOKS, DAVID	President, Brooks Underground Tel. Co., Philadelphia, Pa,	June 5, 1888
BROPHY, WILLIAM	Inspector and Electrical Expert, The New England Insurance Exchange, Boston. Residence, 51 Salem St., Worcester, Mass.	Mar. 5, 1889
BROWN, CHARLES A.	Manager Western Electric Co., 227 South Clinton St., Chicago, Ill.	July 12, 1887
BROWNING, HOWARD L.	Promoter and Contractor, 41 Dey St., New York.	Dec. 6, 1887
BUCKINGHAM, CHAS. L.	Patent Attorney, Western Union Telegraph Co., 195 Broadway, New York.	April 15, 1884
CARROLL, LEIGH	President and General Manager, The Edison Electric Illuminating Co., Birmingham, Ala.	Oct. 1, 1889
CASE, WILLARD E.	6 Fort St., Auburn, N. Y.	Feb. 7, 1888
CHENEY, FREDERICK A.	Sec'y, Treas'r and General Manager, The Elmira Illuminating Co., Elmira, N. Y.	Oct. 1, 1889

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Name.	Address.	Date of Membership.
CHILD, FRANK W.	Contractor and Builder of Electric Railways, 115 Broadway, New York.	July 10, 1888
CHILDS, W. H.	Bookkeeper for The Estey Organ Co., Brattleboro, Vt.	Sept. 6, 1887
CHINNOCK, C. E.	Edison United M'f'g Co., 65 Fifth Ave., New York.	April 15, 1884
CHUBBUCK, H. EUGENE	Electrician and Manager, Champion City Electric Light Co., Springfield, O.	Dec. 4, 1888
CLEVELAND, WM. B.	Electrical Engineer, 309 Perry-Payne Building, Cleveland, O.	April 15, 1884
COFFIN, CHAS. A.	Vice-President and Treasurer, Thomson-Houston Electric Co., 620 Atlantic Ave , Boston, Mass.	Dec. 6, 1887
COLLINS, W. FORMAN	Electrical Engineer, 346 West Twenty-first St., New York.	Dec. 6, 1887
COMPTON, ALFRED G.	Professor of Physics, College of the City of New York, 17 Lexington Ave., New York.	Nov. 1, 1887
CRANE, W. F. D.	Electrician and Mechanical Engineer, The Electric Car Co. of America, Twenty-third St. and Washington Ave., Philadelphia, Pa	Feb. 7, 1888
CURTIS, CHAS. G.	114 East Thirtieth St., New York.	April 15, 1884
CURTISS, GEORGE F.	Electrician, Thomson-Houston Electric Co., Lynn, Mass.	April 2, 1889
CUNTZ, JOHANNES H.	Assistant to Pres't Henry Morton, Stevens Institute of Technology, 137 Hudson St., Hoboken, N. J.	Mar. 5, 1889
CUSHMAN, HOLBROOK	Electrical Engineer, 337 West Twenty-second St., New York.	June 5, 1888
DANA, R. K.	Agent Washburn and Moen M'f'g Co., 16 Cliff St , New York.	April 15, 1884
DANFORTH. A. H.	Great Falls, Montana.	July 12, 1887
DAVENPORT, GEORGE W.	General Manager Thomson-Houston International Electric Co., 620 Atlantic Ave., Boston, Mass.	June 4, 1889
DAVIS, CHAS. M.	Superintendent, Light, Heat & Power Co , Pueblo, Col.	July 12, 1887
DAVIS, DELAMORE L.	Superintendent, Salem Electric Light & Power Co., Salem, O.	April 2, 1889
DAVIS, JOSEPH P.	Consulting Engineer, 18 Cortlandt St., New York.	April 15, 1884
DAVIS, MINOR M.	Ass't Electrician, Postal Telegraph Cable Co , 5 Dey St., New York.	April 6, 1886
DELANY, PATRICK BERNARD,	Inventor, 84 Broad St., New York.	April 15, 1884
DENTON, JAMES E.	Professor of Experimental Mechanics, Stevens Institute of Technology, Hoboken, N. J..	July 12, 1887
DICKERSON, E. N., JR.	Attorney-at-Law, 5 Beekman St., New York.	April 15, 1884
DOANE, S EVERETT	Thomson-Houston Electric Co., Swampscott Mass	Aug. 6, 1889

Name.	Address.	Date of Membership.
DOBBIE, ROBERT S.	Electrician, The Van Gestal Electric Street Car Co., 327 Eighth Ave., New York.	Feb. 5 1889
DOREMUS, CHARLES A.	*M. D. Ph. D.* Chemist and Physicist, Bellevue Hospital Medical College, College of the City of New York and American Veterinary College, 92 Lexington Ave., New York.	July 7, 1884
DUDLEY, CHARLES B.	Chemist and Scientific Expert, Penn. R. R. Co, 1219 Twelvth Ave., Altoona, Pa.	Oct. 1, 1889
DURANT, GEO. F.	Vice-Pres't of Bell Telephone Co. of Mo., 322 Pine St., St. Louis, Mo.	April 15, 1884
EMMET, HERMAN L. R	Publisher and Printer, 36 Cortlandt St., New York.	April 15, 1884
FARMER, PROF. MOSES G.	Electrician and Inventor, Eliot, Me.	April 15, 1884
FIELDING, FRANK E.	Chemist and Assayer, Virginia City, Nev.	Sept. 6, 1887
FLACK, J. DAY	Ass't Electrician in charge of Tests, Edison Lamp Co, Harrison, N. J.	Dec. 6, 1887
FLEMING, WALTER M.	*M. D.* Vice-President of the Averell Insulating Conduit Co., 45 Broadway, Room 1, New York.	Jan. 3, 1888
FORD, ELLSWORTH	Superintendent Edison Electric Light Co., Ottumwa, Ia.	July 12, 1887
FULLER, LEVI K.	Vice-President, Estey Organ Co., Brattleboro, Vt.	Mar. 5, 1889
GILES, WALTER A.	Electrical Engineer, Westinghouse Electric Co., 120 Broadway, New York.	Nov. 1, 1887
GILLILAND, E. T.	Vice-Pres't Empire City Elec. Co., 15 Dey St. Residence, 179 West End Ave., New York.	April 15, 1884
GOLDMARK, CHAS. J.	963 Park Ave., New York.	June 5, 1888
GOULD, CHAS. W.	2 Wall St., New York.	May 24, 1887
GRAY, W. N.	Manager, Branch Office, Mather Electric Co., Cincinnati, O.	Oct. 1, 1889
GRISCOM, WM. W.	President, The Electro Dynamic Co, and Managing Electrician, The Electrical Accumulator Co., New York. Residence, Haverford College P. O., Pa.	June 5, 1888
GUTMANN, LUDWIG	Electrical Engineer. P. O. Box 374, Fort Wayne, Ind.	Sept. 14, 1888
HALL, GEO C. T.	Electrical Expert. Care of Thomson-Houston Electric Co, 148 Michigan Ave., Chicago, Ill.	July 12, 1887
HALL, HENRY D.	Promoter (or Exploiting of Electrical Enterprises). 15 Dey St, New York.	June 8, 1887
HALL, EDWIN H.	Assistant Professor of Physics, Harvard College, 5 Avon St., Cambridge, Mass.	Sept. 3, 1889
HARDING, H. McL.	General Agent, Sprague Electric Railway and Motor Co., The Rookery, Chicago, Ill.	May 24, 1887
HARVEY, WIRT B.	43½ Madison St., Memphis, Tenn.	Dec. 6, 1887
HATZEL, J C.	Electrical Engineer and Contractor, 29 West Twenty-sixth St., New York.	Sept. 3, 1889

Name.	Address.	Date of Membership.
HEALY, CLARENCE L.	Sup't and Electrician, Commercial Telegram Co., 18 Broadway, New York.	April 15, 1884
HEBARD, GEORGE W.	Pres't, United States Electric Light Co., 120 Broadway, New York.	April 15, 1884
HENDERSON, ALBERT H.	Ries and Henderson, 45 Chamber of Commerce, Baltimore, Md.	July 12, 1887
HEINRICH, RICHARD O.	Demonstrator in Electrical Engineering and Physics, Lehigh University, South Bethlehem, Pa.	Oct. 1, 1889
HENSHAW, FREDERICK V.	Assistant Electrician, The "C. & C." Electric Motor Co., 402 Greenwich St., New York.	Feb. 5, 1889
HOCHHAUSEN, WILLIAM	Electrician, The Excelsior Electric Co., 196 Willoughby St., Brooklyn, N. Y.	April 15, 1884
HOPKINS, J. HERBERT	Superintendent, Central Electric Construction Company's Branch Office, 212 N. High St., Nashville, Tenn.	April 2, 1889
HOWELL, WILSON S.	Electrical Expert, Central Station, Edison Elec. Light System, New Brunswick, N. J.	Sept. 3, 1889
HOWSON, HUBERT	Patent Lawyer, 38 Park Row, New York.	June 8, 1887
HUBRECHT, DR. H. F. R.	Director, Nederlandsche Bell Telephone Co., Amsterdam, Holland.	Oct. 4, 1887
HUMPHREYS, C. J. R.	Manager, Lawrence Gas Co., Lawrence, Mass.	Sept. 6, 1887
IDELL, FRANK E.	Mechanical Engineer, 41 Dey St., New York.	July 12, 1887
IHLDER, JOHN D.	Electrical Engineer, with Asterheld & Eickmeyer, Manuf'rs of Dynamos and Motors, Yonkers, N. Y.	Oct. 2, 1888
INSULL, SAMUEL	Electrical Manufacturer, 44 Wall St., New York.	Dec. 7, 1886
ISELIN, HENRY S.	President, Gibson Electric Co., 74 Cortlandt St., New York.	June 2, 1885
IVES, EDWARD B.	Lieutenant U. S. A., Davids Island, New York.	April 2, 1889
IZARD, E. M.	Electrical Engineer, Secretary and Treas'r of the Leonard & Izard Co., 425, The Rookery, Chicago, Ill.	Mar. 5, 1889
JACKSON, C. H.	Vice-Pres't, Standard Underground Cable Co., Allegheny, Pa.	May 24, 1887
JACKSON, DUGALD C.	Sprague Electric Railway and Motor Co., 16 Broad St., New York.	May 3, 1887
JACKSON, FRANCIS E.	With Edison Lamp Co., Harrison, N. J.	Jan. 3, 1888
JAEGER, H. J.	Chemical, Physical and Electrical Glass Blowing, 173 Pearl S,., Brooklyn, N. Y.	July 12, 1887
JOHNSTON, W. J.	President, The W. J. Johnston Co., Ltd., Times Building, New York.	April 15, 1884
JONES, SEBASTIAN C.	Electrical Engineer, Aurora, N. Y.	Sept. 6, 1887
JUDSON, WM. PIERSON,	U. S. Civil Engineer, Oswego, N. Y.	June 8, 1887
KENNELLY, A. E.	Electrician, Edison Laboratory, Orange, N. J.	May 1, 1888

Name.	Address.	Date of Membership.
KERR, THOMAS B.	Attorney-at-Law, 32 Nassau St., New York.	Nov. 1, 1887
KIMBALL, A. S.	Professor of Physics, Worcester Polytechnic Institute, Worcester, Mass.	Sept. 3, 1889
KNAPP, ALLAN C.	Electrician, 225 Dearborn St, Chicago, Ill.	Sept. 6, 1887
KREIDLER, W. A.	Editor and Publisher, *Western Electrician*, 6 Lakeside Building, Chicago, Ill.	Oct. 4, 1887
LAIN, DAVID E., *B. S.*	Electrical Engineer, Yonkers, N. Y.	Nov. 13, 1888
LAW, M. D.	General Sup't, United States and Phila. Electric Light Co., Twentieth and Johnston Sts., Philadelphia, Pa.	Feb. 7, 1888
LEDOUX, A. R.	Chemical Expert, 10 Cedar St., New York.	Dec. 7, 1886
LELAND, H. W.	Manager, Telephone Exchange, 259 Washington St., Jersey City N. J.	April 15, 1884
LEMP, HERMANN, JR.	Electrician, Thomson Electric Welding Co., Lynn, Mass.	April 2, 1889
LEWIS, HENRY FREDERICK WILLIAM.	General Manager and Secretary of the Western Counties South Wales Telephone Co., England, 16 High St, Bristol, Eng.	Mar. 5, 1889
LIEBIG, GUSTAV A., JR.	Elec'l Testing Bureau, Johns Hopkins University, Baltimore, Md.	Mar. 6, 1888
LOWREY, GROSVENOR P.	Lawyer, 15 Broad St., Residence 121 Madison Ave., New York.	Nov. 1, 1887
MACLILIE, C. H.	Broker in Electrical Securities, temporary address, 125 Temple Court, New York.	July 12, 1887
MADDEN, O. E.	President, Empire City Electric Co., 15 Dey St., New York.	April 15, 1884
MAGIE, LOUIS J.	Electrical Engineer, in charge of European Office of Thomson-Houston International Electric Co., Michaelisbrücke 1, Hamburg, Gy.	April 2, 1889
MAILLOUX, C. O.	Consulting Electrical Engineer, 32 Liberty St., New York.	April 15, 1884
MANSFIELD, GEO. W.	Electrical Engineer, with Thomson-Houston Electric Co, 620 Atlantic Ave., Boston, Mass.	June 2, 1885
MARSHALL, J. T.	Inspector of Lamp Manufacture, Edison Lamp Co., Harrison, N. J.	Oct. 1, 1887
MARTIN, T. COMMERFORD	(*Past President* and *Vice-President.*) Editor, *The Electrical World*, Times Building. New York.	April 15, 1884
MAVER, WILLIAM, JR.	(*Manager.*) Electrical Expert, 31 Nassau St., New York.	July 12, 1887
MCINTIRE, CHAS.	Manufacturer of McIntire's Patent Electric Wire Connectors, &c., 36 Crawford St., Newark, N. J.	July 12, 1887
MCKIBBIN, GEORGE N.	Chemist and Electrician, 46 West Fifty-first St., New York.	June 8, 1887
MCKINSTRY, J. P.	185 Seneca St., Cleveland, O.	April 15, 1884
MCMAHAN, JOHN M.	Bergen Point, N. J.	Aug. 6, 1889
MERCER, ANDREW G.	Treasurer and Electrician, Waterloo Electric Co., Waterloo, N. Y.	Sept. 3, 1889

Name.	Address.	Date of Membership.
MILLER, JOSEPH A.	Civil and Consulting Engineer, Providence, R. I.	Dec. 9, 1884
MINER, W. M.	Electrician and Inventor, 89 East Second St., Plainfield, N. J.	July 12, 1887
MITCHELL, JOHN MURRAY	Lawyer, 45 Wall St., New York.	June 2, 1885
MIX, EDGAR W.	Electrician, with Thomson-Houston Electric Co., Lynn, Mass.	Sept. 3, 1889
MORRISON, J. FRANK	15 South St., Baltimore, Md.	April 15, 1884
MORTON, HENRY, *Ph. D*	President of Stevens Institute of Technology, Hoboken, N. J.	May 24, 1887
MOSES, DR. OTTO A.	Electrician, 131 East Seventy-third St., New York.	May 17, 1887
MOSSCROP, WM. A.	26 Court St., Brooklyn, N. Y.	May 7, 1889
NICHOLLS, F. VICTOR	Electrician and Manager Vancouver Electric Illuminating Co., Vancouver, B. C.	Dec. 4, 1888
NUNN, RICHARD J., *M. D.*	Physician, 119 York St., Savannah Ga.	July 12, 1887
OATIS, JOHN X.	Manager and Electrician, Amsterdam Electric Light & Power Co., Amsterdam, N. Y.	Sept. 7, 1888
OCKERHAUSEN, H. A.	Electrical Engineer, Brooklyn & N. Y. Ferry Co., Brooklyn, E. D., N. Y.	Sept. 6, 1887
O'DEA, M.	Electrician, University of Notre Dame, Notre Dame, Ind.	June 8, 1887
PARSHALL, H. F.	Electrician, Sprague Electric Railway & Motor Co., 16 Broad St., New York.	Sept. 7, 1888
PAUL, CHAS. M.	Electrician, 172 Remsen St., Brooklyn, N. Y.	May 7, 1889
PECK, SAMUEL C.	Electrician, Thomson-Houston Electric Co., 620 Atlantic Ave, Boston, Mass.	Sept. 6, 1887
PEIRCE, WM. H.	Superintendent Marine Installations, United Edison M'f'g Co., 65 Fifth Ave., New York.	Sept. 7, 1888
PHELPS, GEO. M.	(*Treasurer*). Electrical Engineer and Editor, 150 Broadway, New York.	April 15, 1884
PHILLIPS, EUGENE F.	M'f'r Insulated Electric Wire, Providence, R. I.	July 13, 1886
PLUSH, DR. S. M.	Electrician, 319 South Tenth St., Philadelphia, Pa.	April 15, 1884
POOLE, CECIL P.	Contracting Electrical Engineer, 206–8 Eighth St. Lynchburg, Va.	Jan. 3, 1888
POPE, RALPH W.	Secretary of the American Institute of Electrical Engineers, 5 Beekman St., New York.	June 2, 1885
PRATT, HERBERT G.	Treasurer Samson Cordage Works, 164 High St., Boston, Mass.	Oct. 4, 1887
RAE, FRANK B.	Electrical Engineer, Detroit Electrical Works, Detroit, Mich.	April 15, 1884
RANDALL, JOHN E.	Incandescent Lamp Dep't, Thomson-Houston Electric Co., Lynn, Mass.	May 7, 1889
REED, CHAS. J.	Electrician, Care of American Institute of Electrical Engineers, 5 Beekman St., New York.	Mar. 5, 1889

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Name.	Address.	Date of Membership.
REED, HENRY A.	Secretary and Manager, Bishop Gutta-Percha Co., 422 East Twenty-fifth St., New York.	June 4, 1889
REILLY, JOHN C.	General Sup't, N.Y. & N. J. Tel. Co, 16 Smith St, Brooklyn, N. Y.	April 15, 1884
REINMANN, A. L.	Electrician, Breckenridge Ave., Pittsburgh, Pa.	June 8, 1887
RIKER, ANDREW L.	Electrical Engineer, 15 East Fifty-fifth St., New York.	Nov. 1, 1887
ROBINSON, ALMON,	Draughtsman, Expert in Methods of Gearing, P. O. Box. 943, Lewiston, Me.	Sept. 6, 1887
ROEBLING, FERDINAND W.	Manufacturer of Electrical Wires and Cables, Trenton, N. J.	June 8, 1887
ROGERS, WINFIELD S.	Mechanical Engineer, Watervliet Arsenal, West Troy, N. Y.	Sept. 3, 1889
ROOME, H. C.	32 Liberty St, New York.	April 15, 1889
ROSENBAUM, WM. A.	Electrical and Patent Solicitor, Care of *The Electrical World*, Times Building, New York.	Jan. 3, 1889
ROYCE, FRED W.	Electrician and Patent Solicitor, 1408 Pennsylvania Ave., Washington D. C.	April 15, 1884
RYAN, HARRIS J.	Professor of Electrical Engineering, Cornell University, Ithaca, N. Y.	Oct. 4, 1887
SARGENT, W. D.	General Manager, N. Y. & N. J. Tel. Co., 16 Smith St., Brooklyn, N. Y.	April 15, 1884
SAWYER, FREDERICK J.	Pres't, The New England Electric Co., 55 Oliver St., Boston. Mass.	June 8, 1887
SAXELBY, FREDERICK,	Electrical Engineer, Superintendent of Exhausting Department, Edison Lamp Co., Harrison, N. J.	June 5, 1888.
SCHMIDT, FREDERICK,	Managing Director, The Schmidt-Douglas Electric Co., L'td., 31 Blenheim Rd, Bradford, England.	Jan. 3, 1888
SEARING, LEWIS	Care A. S. Pope, Colorado Springs, Colorado.	April 3, 1888
SEELY, J. A.	Electrician, Metropolitan Telephone & Telegraph Co., 18 Cortlandt St., New York,	April 15, 1884
SERRELL, LEMUEL WM.	Mechanical Engineer and Managing Director, Daft Electric Light Co., Jersey City, N. J.	Nov. 1, 1887
SHEEHAN, WILLIAM M.	Manager and Electrician, Newburgh Electric Light & Power Co., 65 Montgomery St., Newburgh, N.Y.	Sept. 3, 1889
SISE, CHARLES F.	Vice-President and Managing Director, Bell Telephone Co., of Canada, and Canadian Telephone Co, Ltd., Montreal, Canada	June 8, 1887
SMITH, GERRITT	Circuit Electrician, 195 Broadway, New York.	April 15, 1884
SMITH, J. ELLIOT	Superintendent Fire Alarm Telegraph, 157 East Sixty-seventh St, New York.	April 15, 1884 ? *
SMITH, JESSE M.	Consulting Electrical Engineer and Expert in Patent Causes, 36 Moffatt Block, Detroit, Mich.	April 15, 1884
SOUZA, CARLOS MONTIERO e	Rua Castilleo 3, Lisbon, Portugal.	Sept. 6, 1887

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Name.	Address.	Date of Membership.
SPRAGUE, FRANK J.	Electrician, and Vice-President, Sprague Electric Railway & Motor Co., 16 Broad St., New York.	May 24, 1887
STANLEY, WILLIAM, JR.	Electrician, Great Barrington, Mass.	Dec. 6, 1887
STEARNS, CHARLES K.	With Thomson-Houston Electric Co., Lynn, Mass.	Aug. 6, 1889
STEBBINS, THEODORE	Electric Railway Inspector, Thomson-Houston Elec. Co, Lynn, Mass.	July 9, 1889
STOCKBRIDGE, GEO. H.	Patent Attorney, 132 Nassau St., New York.	May 24, 1887
STOCKLY, GEO. W.	President, Brush Electric Co., Cleveland, O.	April 15, 1884
STUART, OTIS K.	Clerk, Thomson Electric Welding Co., Lynn, Mass.	Jan. 4, 1889
TAYLOR, CHARLES	Metallurgist, U. S. Assay Office, 30 Wall St., New York.	Nov. 1, 1887
TEMPLE, WILLIAM CHASE	Electrical Engineer, 575 Madison Ave., New York.	May 3, 1887
TESLA, NIKOLA	Electrical Engineer and Inventor, Westinghouse Electric Co., Pittsburgh, Pa.	June 5, 1888
THOMPSON, EDWARD P.	Consulting Electrician and Patent Attorney in Electrical Cases, 5 Beekman St., New York.	April 15, 1884
THOMPSON, WILLIAM GEO.	MACNEILL, Resident Engineer, Sault Ste. Marie Canal, Sault Ste. Marie, Ontario.	July 12, 1887
THOMSON, PROF. ELIHU	(*President*). Electrician, Thomson-Houston Electric Co., and Thomson Electric Welding Co., Lynn, Mass.	April 15, 1884
TOWNSEND, HENRY C.	(*Manager*). Attorney and Expert in Electrical Cases, 5 Beekman St., New York.	July 10, 1888
TREGONING, JOHN	Sup't, Thomson Electric Welding Co., 325 Boston St., Lynn, Mass.	April 2, 1889
UHLENHAUT, FRITZ, JR.	Electrician, with Edison Electric Illuminating Co. of Brooklyn, 26 Court St., Brooklyn, N. Y.	May 7, 1889
UPTON, FRANCIS R.	(*Vice-President*). Treasurer and General Manager, Edison Lamp Co,, Harrison, N. J.	May 17, 1887
VAN BRUNT, WALTER	Manager, Duluth Telephone Co., Duluth, Minn.	Sept. 6, 1887
VANCE, A. ST. CLAIR	425, The Rookery, Chicago, Ill.	April 2, 1889
VAN HOEVENBERGH, HENRY	(*Manager*). Electrical Engineer and Inventor, 108 Liberty St., New York.	June 5, 1888
VAN TRUMP, C. REGINALD	Under-Graduate in Electrical Engineering, Cornell University, Ithaca, N. Y.	Feb. 5, 1889
VAN VALKENBURGH, F. S.	Central and South American Tel. Co., Tehuantepec, Mexico.	June 5, 1886
VAN VLECK, FRANK	Chief Engineer, San Diego Cable Tramway Co., San Diego, Cal.	Nov. 16, 1886
VIDUARRE, JOSE	Dealer in Electrical Supplies, Ponce, Porto Rico.	Sept. 6, 1887

Name.	Address.	Date of Membership.
WACKER, GEORGE G.	Electric Organs, 3644 Third Ave., New York.	Sept. 6, 1887
WALLACE, WILLIAM	Wire Manufacturer, Ansonia, Conn.	April 15, 1884
WALTER, HENRY E.	Schenectady, N. Y.	April 2, 1889
WARING, RICHARD S.	205 Penn Building, Pittsburgh, Pa.	April 15, 1884
WATERHOUSE, FRANK G.	Ass't General Sup't, Westinghouse Electric Co., Pittsburgh, Pa.	Sept. 6, 1887
WEIL, LEOPOLD	Importer, 121 Mercer St., New York.	June 8, 1887
WELLES, FRANCIS R.	Manufacturer, Bell Telephone Manufacturing Co., Antwerp, Belgium	Sept. 6, 1887
WHITE, H. C.	Manager, Phœnix Iron Works Co., 16 Dey St., New York.	April 15, 1884
WHITE, J. G.	Manager, The Western Engineering Co., Kearney, Neb.	April 2, 1889
WHITNEY, HENRY M.	President, West End Street Railway Co., 81 Milk St., Boston, Mass.	July 12, 1887
WIGHTMAN, MERLE J.	Electrical Engineer and Inventor, Thomson-Houston Electric Co., Lynn, Mass.	Mar. 5, 1889
WILEY, WM. H.	Scientific Expert, 15 Astor Place, New York.	Feb. 7, 1888
WILLIAMS, CHARLES, JR.	Electrician, 100 Sudbury St., Boston, Mass.	April 15, 1884
WILLIAMS, JAMES B. *M. D.*	Physician, 1068 Eighteenth St., Oakland, Cal.	Sept. 7, 1888
WINKLER, CHARLES F.	Electrician, Troy Electric Dynamo Co., 4 Park Ave., Troy, N. Y.	Sept. 3, 1889
WINFRINGHAM, J. P.	Theorist, 36 Pine St., New York.	May 7, 1889
WOLCOTT, TOWNSEND	Consulting Electrician, 828 Monroe St., Brooklyn, N. Y.	Mar. 6, 1888
WOOD, E. J.	Consulting Engineer and Contractor, 243 Broadway, New York.	July 12, 1887
WOODRUFF, H. O.	Agent, Sprague Electric Railway & Motor Co., Des Moines, Iowa.	Oct. 2, 1888
WORTHINGTON, GEORGE	Manager, *Electrical Review*, 13 Park Row, New York	April 15, 1884
YOUNG, ALDEN M.	Contractor for Organization and complete Equipment of Electric Lighting Plants, 101 Bank St., Waterbury, Conn.	Sept. 6, 1887
YOUNG, C. GRIFFITH	Superintendent and Electrician, Mount Morris Electric Co., 56 Broad St., Residence, 262 West One hundred and twenty-third St., New York.	Jan. 3, 1889
ZALINSKI, CAPT. E. L.	U. S. A., Fort Hamilton, N. Y.	May 17, 1887

Associate Members, - - - 224.

RECAPITULATION.

Honorary Members, - - - - - - - - -	1
Members, - - - - - - - - - - -	132
Associate Members. - - - - - - - - -	224
Total - - - - -	357

Any errors in this list, or changes in address should be reported to the Secretary.

68 "charter members" are noted in the foregoing list. CA 4/3/34.

(*Sample pages of the Index of Current Electrical Literature, the average number of which is 16 pages in each monthly issue of the* TRANSACTIONS.)

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Profs. Ayrton & Perry's Hot Wire Voltmeter. (Ill.) *Lond. Elec. Rev.*, March 8, p. 272; *West. Elecn.*, March 23, p. 171.

Lockwood Ammeter and Polarity Indicator. (Ill.) *N. Y. Elec. Rev.*, March 23, p. 1.

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On the Measurement of the Resistance of Imperfectly Purified Sulphur. Prof. Threlfall & A. Pollock. Phys. Soc. *Lond. Elec. Engr.*, March 29, p. 263.

On the Measurement of High Specific Resistances. R. Threlfall. Phys. Soc. *Lond. Elec. Engr.*, March 29, p. 263.

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The "Victor" Split Insulator and Hanger. (Ill.) *Elec. World*, March 30, p. 189; *N. Y. Elec. Rev.*, March 30, p. 6; *West. Elecn.*, March 30, p. 172.

The Wimshurst Electric Machine. (Ill.) *N. Y. Elec. Rev.*, March 9, p. 2; *Elec. World*, March 9, p. 148.

Ball and Socket Insulating Joint. (Ill.) *West. Elecn.*, March 23, p. 163.

An Electric Valve. (Note.) M. Neyreneuf. *Journal de Physique; Lond. Elec. Engr.*, March 15, p. 206.

Electrical Type-Setter. (Note.) *Lond. Elec. Engr.*, March 8, p. 187.

Electric Blow Pipe. (Note.) *Lond. Elec. Engr.*, March 1, p. 169.

An Insulator for Electrical Conductors. W. C. Brown. *Sci. Am.*, March 30, p. 195.

An Electric Date Stamp. *Eng.; Science*, March 1, p. 160.

An Electrical Messenger. *Md. Lt. & Ht.*, March 14, p. 347. (New Haven Clock Co.)

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The Ostrander Door Opener. (Ill.) *N. Y. Elec. Rev.*, March 9, p. 3; *West. Elecn.*, March 2, p. 125.

New Electrical Devices. *Md. Lt. & Ht.*, March 7, p. 315. (Elec. Supply Co.)

Berry's Improved Electric Bell. (Ill.) *Lond. Elecn.*, March 22, p. 574; *Indust.*, March 22, p. 281; *Lond. Elec. Rev.*, March 22, p. 325.

Electrical Exhibits and the Institute of Journalists. *Lond. Elec. Rev.*, March 22, p. 324.

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Some Queer Joints. C. Monroe Doten. *Elec. World*, March 16, p. 161.

Mining Engineers in Convention. *Elec. World*, March 2, p. 134.

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The Electric Duel. (Ill.) *Elec. World*, March 9, p. 149.

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Edwin Ruthven Weeks. (With Portrait.) *West. Elecn.*, March 2, p. 123.

The Canadian Electrical Society of Montreal. *Elec. World*, March 2, p. 135.

"Light and Color." Prof. Robt. Spice. Elec. Club. *N. Y. Elec. Rev.*, March 30, p. 2; *Md. Lt. & Ht.*, March 28, p. 402.

Chicago Electric Club. *West. Elecn.*, March 16, p. 148; March 30, p. 173.

The Boston Electric Club. *Md. Lt. & Ht.*, March 14, p. 341.

The Centennial of Ohm. (With Portrait.) *Elec. World*, March 16, p. 156; *Lond. Elec. Rev.*, March 1, p. 240.

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Transactions of the Institute Already Published.

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Vol. II, 1885.

THE PROTECTION OF ELECTRICAL INVENTIONS. F. Jannus, of Washington, D. C.—COST OF MINE LIGHTING. Frank P. Mills, now of Ishpeming, Mich.—THE ELECTRIC ARC LAMP FRICTIONAL CLUTCH. (Illustrated.) By Edward P. Thompson of New York.—DESCRIPTION OF A LARGE SECONDARY BATTERY PLANT FOR GENERAL COMMERCIAL DISTRIBUTION. E. P. Roberts, of Cleveland, O.—DELANY'S SYSTEM OF FAC-SIMILE TELEGRAPHY. (Illustrated.) Prof. Edwin J. Houston of Philadelphia.

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UNDERGROUND ELECTRICAL SYSTEMS. By Sidney F. Shelbourne.—THE GREAT TANGENT GALVANOMETER OF THE CORNELL UNIVERSITY. Prof. W. A. Anthony, now of Manchester, Conn.—SOME RECENT ADVANCES IN TELEPHONY. (Illustrated.) Thomas D. Lockwood, of Boston, Mass.—THE PATENT OFFICE AND PATENT OFFICE PRACTICE. A. C. Fowler, of New York.—STATIC DIFFICULTIES IN TELEGRAPH WIRES. F. W. Jones of New York. Containing a Synopsis, with reference to 113 American and Foreign Patents for Inventions intended to overcome these difficulties.—SECONDARY BATTERIES FOR LIGHT AND POWER. A. H. Bauer.—THE WIRE GAUGE. Report of Committee.—NOTES ON DYNAMIC INDUCTION. Sidney F. Shelbourne.

Vol. IV, 1887.

ELECTRIC STREET CARS. T. C. Martin, of New York.—THE PRACTICAL REQUIREMENTS OF SMALL MOTORS. S. S. Wheeler, of New York.—DISTRIBUTION OF ELECTRICITY BY SECONDARY GENERATORS. Discussion by F. L. Pope, Dr. Otto A. Moses, Captain O. E. Michaelis, Prof. Elihu Thomson and others.—STORAGE BATTERIES IN PRACTICE. E. P. Roberts, of Cleveland, O.—DIFFERING TEMPERATURE COEFFICIENTS OF THE DIFFERENT COILS OF A FINE RHEOSTAT. Prof. W. A. Anthony, now of Manchester, Conn.—ON THE BEST RATIO OF THE SECTION OF THE GRAMME ARMATURE TO THE SECTION OF THE FIELD MAGNETS. (Illustrated.) Dugald C. Jackson, now of Lincoln, Neb.—NOVEL PHENOMENA OF ALTERNATING CURRENTS. (Illustrated.) Prof. Elihu Thomson, of Lynn, Mass.—A FEW COMPARATIVE STATISTICS OF ELECTRIC RAILWAYS. T. C. Martin, of New York. (With tabular statement.)—CENTRAL STATION CONSTRUCTION. J. A. Powers, of Troy, New York.—ON THE CHANGE FROM NEGATIVE TO POSITIVE OF THE TEMPERA

TURE COEFFICIENTS OF SOME CARBON FILAMENTS. (Illustrated.) Prof. W. A. Anthony, of Manchester, Conn.—LEAD ENCASED CONDUCTORS. (Illustrated.) David Brooks, of Philadelphia.—THE ELECTRIC LIGHTING OF PASSENGER TRAINS. (Illustrated.) Geo. W. Blodgett, of Boston.

Vol. V, 1887-8.

ON ELECTRIC STREET CARS, WITH SPECIAL REFERENCE TO METHODS OF GEARING. Anthony Reckenzaun, of London. No. 1, October, 1887.—A COULOMB METER, OR INSTRUMENT FOR MEASURING THE CONSUMPTION OF ELECTRICITY. (Illustrated.) Prof. George Forbes, F.R.S., of London. No. 2, November, 1887.—RECENT IMPROVEMENTS IN APPARATUS FOR OCEAN CABLING. (Illustrated.) Charles Cuttriss. Supplementary Note on the Siphon Recorder, and Ocean Telephony, by Thos. D. Lockwood. No 3, December, 1887.—PHENOMENA OF RETARDATION IN THE INDUCTION COIL. (Illustrated.) William Stanley, Jr. No. 4, January, 1888.—REVISION OF THE PATENT LAW. Arthur Steuart, Esq. No. 5, February, 1888.—ELECTRIC ENERGY FROM CARBON WITHOUT HEAT. Willard E. Case, Auburn, N. Y. No. 6, March, 1888.—ALTERNATING CURRENT ELECTRIC MOTORS. Dr. Louis Duncan, Baltimore, Md. No. 7, April, 1888.—MAXIMUM EFFICIENCY OF INCANDESCENT LAMPS. (Illustrated.) John W. Howell. No. 8, May, 1888.—PROTECTION OF THE HUMAN BODY FROM DANGEROUS CURRENTS. Patrick B. Delany.—THE POSSIBILITIES AND LIMITATIONS OF CHEMICAL GENERATORS OF ELECTRICITY. Francis B. Crocker. No. 9, June, 1888.—ON COMPENSATED RESISTANCE STANDARDS. (Illustrated:) Edward L. Nichols. A NEW SYSTEM OF ALTERNATE CURRENT MOTORS AND TRANSFORMERS. (Illustrated.) Nikola Tesla. UNDERGROUND ELECTRICAL CONDUCTORS IN EUROPE AND AMERICA. Prof. G. W. Plympton. THE PATENT COURT AND UNIFORMITY IN PATENT OFFICE PRACTICE. George H. Stockbridge. A SWINGING ARM GALVANOMETER. (Illustrated.) George S. Moler. No. 10, July, 1888. THE SOLUTION OF THE MUNICIPAL RAPID TRANSIT PROBLEM. (Illustrated.) Frank J. Sprague. No. 11, August, 1888. SOME OBJECTIONS TO THE OVERHEAD CONDUCTOR FOR ELECTRIC RAILWAYS, M. B. Leonard. NOTE ON GEARING FOR ELECTRIC RAILWAY MOTORS, Almon Robinson. No. 12, September, 1888.

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THE GEYER-BRISTOL METER FOR DIRECT AND ALTERNATING CURRENTS. [Illustrated.] Prof. William F. Geyer. THE ABDANK MAGNETIC CALL AND THE ABDANK INTEGRAPH. [Illustrated.] E. Abdank-Abakanowicz. No. 1, January, 1889. SIX YEARS PRACTICAL EXPERIENCE WITH THE EDISON CHEMICAL METER. (Illustrated.) W. J. Jenks. No. 2, February, 1889. LIGHTNING ARRESTERS AND THE PHOTOGRAPHIC STUDY OF SELF-INDUCTION. (Illustrated.) E. G. Acheson. No. 3, March, 1889. A NEW SYSTEM OF MULTIPLEX TELEGRAPHY. (Illustrated.) Lieut. F. Jarvis Patten. LIGHTNING ARRESTERS AND THE PHOTOGRAPHIC STUDY OF SELF INDUCTION. Notes by Jo. Stanford Brown and Chas. T. Child. REPLY TO THE NOTES OF MESSRS. BROWN AND CHILD by E. G. Acheson. No. 4, April, 1889. THE EFFICIENCY OF METHODS OF ARTIFICIAL ILLUMINATION. Illustrated. Edward L. Nichols. No. 5, May, 1889. SOME RESULTS WITH SECONDARY BATTERIES IN TRAIN LIGHTING. (Illustrated.) Alexander S. Brown. THE INHERENT DEFECTS OF LEAD STORAGE BATTERIES. (Illustrated.) Dr. Louis Duncan. ELECTRIC MOTOR REGULATION. (Illustrated.) Francis B. Crocker. Nos. 6 and 7, June and July 1889, (Double Number). MAGNETISM IN ITS RELATION TO INDUCED ELECTROMOTIVE FORCE AND CURRENT. (Illustrated.) Prof. Elihu Thomson of Lynn, Mass. ON THE RELATION BETWEEN THE INITIAL AND THE AVERAGE EFFICIENCY OF INCANDESCENT LAMPS. (Illustrated.) W. H. Peirce of New York. THE EFFICIENCY OF THE ARC LAMP. (Illustrated.) H. Nakano, of Japan, with an introductory note by Prof. E. L. Nichols. THE SPIRAL COIL VOLTAMETER. (Illustrated.) Harris J. Ryan, of Ithaca, N. Y. THE PERSONAL ERROR IN PHOTOMETRY. (Illustrated). Prof. Edward L. Nichols, of Ithaca, N. Y. ON MODERN VIEWS WITH RESPECT TO ELECTRIC CURRENTS. (Illustrated.) Prof. Henry A. Rowland, of Baltimore, Md. CLASSIFIED LIST OF MEMBERS. Nos. 8 and 9, August and September, 1889, (Double Number.)

(Vol. VI is now being published in monthly parts.)

American Institute of Electrical Engineers.

CATALOGUE OF MEMBERS.

February 1st, 1891.

HONORARY MEMBERS.

Name.	Address.	Date of Membership.
Farmer, Prof. Moses G.	Electrician and Inventor, Eliot, Me.	A April 15, 1884 H.M. Oct. 21. '90
Green, Dr. Norvin	(*Past President*). Pres't Western Union Telegraph Co. P. O. Box 3393, 195 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884 H.M Dec. 3, 1889
Preece, Wm. H. *F. R. S.*	Electrician, General Post Office, London, Eng. Residence, Gothic Lodge, Wimbledon.	H.M. Oct. 21, 1884

MEMBERS.

Acheson, Edw. G.	Electrician, Monongahela City, Pa.	A Jan. 3, 1888 M May 1, 1888
Ahearn, T.	Ahearn & Soper, Electrical Supplies, Ottawa. Ont.	A July 12, 1887 M Sept. 6, 1887
Anthony, Prof. W. A.	Consult'g Electrician. The Mather Electric Co., Manchester, Conn	A Dec. 9, 1884 M Jan. 6, 1885
Batcheller, B. C.	Superintendent of the Pneumatic Dynamite Gun Co., 71 Broadway. New York.	A Sept. 6, 1887 M Nov. 1, 1887
Batchelor, Chas.	Electrical Engineer, 33 West Twenty-fifth St., New York.	A June 8, 1887 M July 12, 1887
Bates, J. H.	Moore Electrical Manufacturing Co., 106-8 Liberty St., New York City.	A Sept. 6, 1887 M Oct. 1, 1889
Bates, Maurice E.	Manager, Western Electric Construction Co., 503 Delaware St., Kansas City, Mo.	A Aug. 6, 1889 M Oct. 1, 1889
Bayly, B.	Surveyor and District Engineer. Western District Colonial Gov't. Cape Town, Cape of Good Hope, Africa.	A Oct. 4, 1887 M Dec. 6. 1887
Bell, Prof. A. Graham	1336 Nineteenth St., Washington, D. C.	A April 15, 1884 M Oct. 21, 1884
Bell, Dr. Louis,	Editor *Electrical World*, 167 Times Building, P.O. Box 3332, N. Y.	A May 20, 1890 M June 17, 1890
Bernard, Edgar G.	Electrical Engineer, E. G. Bernard & Co., Hall Building, Troy, N. Y.	A Jan. 5, 1886 M July 12, 1887

Name.	Address.	Date of Membership.
BINNEY, HAROLD	Assistant in the Practice of Patent Law, with Gilbert M. Plympton, 245 Broadway, New York City.	A Sept. 16, 1890 M Dec. 16, 1890
BIRDSALL, E. T. *M. E.*	Electrical Engineer, 115 Broadway, New York.	A June 8, 1887 M Nov. 1, 1887
BLAKE, EDWARD	361 Temple Street, New Haven, Conn.	A May 24, 1887 M Sept. 3. 1889
BLAKE, FRANCIS	Auburndale, Mass.	A Sept. 3. 1889 M Oct. 1. 1889
BLODGETT, GEO. W.	Electrical Engineer B. & A. R. R. and onsulting Electrician, Boston, Mass.	A July 12, 1887 M Sept. 6. 1887
BOSCH, ADAM	Sup't, Fire Alarm Telegraph, Newark, N. J.	A April 15, 1884 M Jan. 6. 1885
BRADLEY, CHAS. S.	Electrical Engineer, Wayne Hotel, Fort Wayne, Ind.	A May 24. 1887 M Dec. 6 1887
BROOKS, MORGAN	Secretary and Treasurer, The Electrical Engineering & Supply Co.. 413 Jackson St., and 529 Holly Ave., St. Paul, Minn.	A May 20, 1890 M June 17. 1890
BROWN, JO. STANFORD	Electrical Engineer, with United Electric Traction Co. 115 Broadway, New York.	A Sept. 6 1887 M Nov. 1. 1887
BRUSH, CHAS. F.	Electrical Engineer, 956 Euclid Ave, Cleveland, O.	A April 15, 18[illegible] M Oct. 21. 188[illegible]
BYLLESBY, HENRY M.	Thomson-Houston Electric Co , 115 Broadway, New York City	A Sept. 7, 1888 M Oct. 2, 1888
CARROLL, LEIGH	President and General Manager, The Edison Electric Illuminating Co., Birmingham, Ala	A Oct 1, 1889 M Nov. 12, 1889
CHAMBERLAIN, J. C.	(*Manager.*) Supt. Julien Electric Traction Co., 135 East 18th St., New York.	A Dec 6. 1887 M Jan. 3, 1888
CHEEVER, CHAS. A.	13 Park Row, New York.	A April 15, 1884 M Oct. 21. 1884
CHURCH, WM. LEE	Member of Westinghouse, Church, Kerr & Co., Engineers, 620 Atlantic Ave., Boston, Mass.	A April 5, 1887 M May 17, 1887
CLARK, ERNEST P.	Electrical Engineer, 192 Broadway, New York.	A Jan. 8, 1887 M Nov. 1, 1887
CLARKE, CHAS. L.	Mechanical and Electrical Engineer, 55 Liberty St., New York.	A April 15, 1884 M Jan. 6, 1885
COLBY, EDWARD A.	Electrician of the Weston Electrical Instrument Co., 606 High St., Newark. N. J.	A April 2, 1889 M May 7, 1889
CONANT, THOMAS P.	District Engineer, Edison General Electric Co.. Edison Building, Broad St., Box 3067, New York	A Nov. 1, 1887 M Jan. 3, 1888
CONDICT, G. HERBERT	General Manager, The Electric Car Co. of America, 4720 Green St., Germantown, Pa.	A July 12, 1887 M Sept. 6, 1887
COTHREN, WM. H.	Edison General Electric Co., Rialto Building. Chicago, Ill.	A Aug. 6, 1889 M Oct. 1, 1889

Name.	Address.	Date of Membership.
COWLES, ALFRED H.	Technical Adviser to the Cowles Smelting and Aluminum Co., Lockport, N. Y.	A Mar. 5, 1889 M May 7, 1889
CROCKER, FRANCIS B.	(*Vice-President.*) Instructor in Electrical Engineering, School of Mines Columbia College, and 54 W. 21st Street. New York.	A May 24, 1887 M April 2, 1889
CROSS, PROF. CHAS. R.	Thayer Professor of Physics, and Director of the Rogers Laboratory. Mass. Institute of Technology, Boston, Mass.	A April 15, 1884 M Oct. 21, 1884
CUTTRISS, CHAS.	(*Manager*). Electrician. The Commercial Cable Co., 1 Broad St., New York.	A Nov. 1, 1887 M Dec. 6, 1887
DAFT, LEO	Electrician, Plainfield, N. J.	A Dec. 9, 1884 M Jan. 6, 1885
DANVERS, ALAN	Managing Director and Chief Electrician, The Anglo-Portugese Telephone Co., L't'd. 60 Travessa Santa Justa, Lisbon, Port'l	A Nov. 1, 1887 M Sept. 3, 1889
DANVERS, ERNESTO	Electrical Engineer, Casilla 74, Rosario, Argentine Republic.	A Jan. 3, 1888 M May 1, 1888
DAVIES, JOHN E.	Professor of Physics, University of Wisconsin, 523 Carroll St. Madison, Wis.	A Jan. 7, 1890 M Mar. 18, 1890
DAVIS, CHARLES H.	Consulting Electrical Engineer, 120 Broadway, New York.	A Mar. 18, 1890 M June 17, 1890
DELAFIELD, A. FLOYD, *Ph.D.*	Electrical Engineer, Noroton, Conn.	A May 7, 1889 M Oct. 1, 1889
DICKENSON, SAMUEL S.	Sup't, Commercial Cable Co., Hazel-Hill, Guysborough Co., N.S.	A Mar. 6, 1888 M Oct. 1, 1889
DIEHL, PHILIP	Inventor, Singer Sewing Machine Co., Elizabeth, N. J.	A April 15, 1884 M Dec. 9, 1884
D'INFREVILLE, GEORGES	Electrical Engineer and Expert 110 Liberty St., New York.	A Nov. 1, 1887 M Dec. 6, 1887
DOIJER, H.	Care of J. G. F. Rooker, W. I. Vostringel, Delft, Holland.	A Jan. 7, 1890 M Mar. 18, 1890
DONNER, WILLIAM H.	Designing Draughtsman, and Electrical Engineer, Thomson-Houston Electric Co., 113 Franklin St., Lynn, Mass.	A Nov. 18, 1890 M Dec. 16, 1890
DUDLEY, CHARLES B.	Chemist and Scientific Expert, Penn R. R. Co., 1219 Twelfth Ave., Altoona Pa.	A Oct. 1, 1889 M Nov. 12, 1889
DUNCAN, DR. LOUIS	(*Vice-President*). Johns Hopkins University, Baltimore, Md.	A July 12, 1887 M Sept. 6, 1887
DYER, R. N.	Patent Attorney, 36 Wall St., New York.	A July 12, 1887 M Sept. 6, 1887
EDISON, THOMAS A.	Electrician and Inventor, Orange, N. J.	A April 15, 1884 M Oct. 21, 1884
FARNHAM, ISAIAH H.	Electrician for the N. E. Telephone & Telegraph Co., 50 Pearl St., Boston, Mass.	A June 8, 1887 M July 12, 1887
FESSENDEN, REGINALD A.	Assistant Electrician, U. S. Electric Light Co., Newark, N. J.	A Oct. 21, 1890 M Dec. 16, 1890
FIELD, C. J.	President and General Manager Field Engineering Co., 15 Cortlandt St., New York.	A June 8, 1887 M Nov. 1, 1887

Name.	Address.	Date of Membership.
FIELD, STEPHEN D.	Electrician and Inventor, Stockbridge Mass.	A April 15, 1884 M Oct 21 1884
FITCH, D. H.	President, The Fitch Battery and Electric Co., Oneida. N. Y.	A Sept. 3, 1889 M Oct. 1. 1889
FLEMING, WILFRID H.	261 Clifton Place, Brooklyn. N. Y	A Dec. 6, 1887 M Jan. 3, 1888
FOSTER, HORATIO A.	(*Manager.*) Electrical Engineer, 45 E. Twenty-second St.. New York	A June 8, 1887 M Sept. 6, 1887
FREEMAN, DR. FRANK L.	Attorney-at-Law. Solicitor of Patents, Electrical Expert. 931 F St., Washington, D. C.	A May 7. 1889 M Sept. 3, 1889
GARRATT, ALLAN V.	National Electric Construction Co. 620 Atlantic Ave.. Boston, Mass.	A April 2, 1889 M May 7, 1889
GARVER, M. M.	48 Walnut St., Newark N. J.	A July 10 1888 M Sept 3, 1889
GEYER, DR. WM. E.	(*Manager*). Stevens Institute of Technology, Hoboken, N. J.	A June 5, 1888 M Sept. 7, 1888
GRISCOM, WM. W.	Haverford College P. O., Montgomery Co., Pa. President, The Electro Dynamic Co., 224 Carter St., Philadelphia and Managing Electrician The Electrical Accumulator Co., New York.	A June 5, 1888 M Mar. 18, 1890
HALL, CLAYTON C.	Civil Engineer, 810 Park Ave., Baltimore Md.	A April 15, 1884 M Oct. 21. 1884
HAMBLET, JAMES	Manager Time Service. W. U. Tel. Co., 195 Broadway, P. O. Box 3393. New York	A Nov. 1, 1887 M Dec 6. 1887
HAMILTON, GEO. A.	Electrician. Western Electric Co., 22 Thames cor. Greenwich St., New York.	A April 15 1884 M Oct. 21, 1884
HAMMER, W. J.	Consulting and Supervising Electrical Engineer, 533 Temple Court, N. Y., and 23 Rowland St., Newark, N J	A June 8, 1887 M July 12, 1887
HANCOCK, WM. J.	Supt. of Telephones, Dept. of Public Works, Perth, Western Australia.	A Jan 7. 1890 M Mar. 18, 1890
HASKINS, CHARLES H.	Electrician, care of New York Club, Fifth Ave. and Thirty-fifth St., New York.	A April 15, 1884 M Oct, 21, 1884
HAYES, HAMMOND V.	Electrician. American Bell Telephone Co . Boston, Mass. 127 Purchase St.. Cambridge Mass.	A Nov. 12, 1889 M Mar. 18, 1890
HAYNES, F. T. J.	Divisional Telegraph Engineer, Great Western Railway, Taunton. Eng.	A Dec. 6. 1888 M Jan. 3. 1887
HAZARD, COL. ROWLAND R.	N. Y. District Railway Co., 120 Broadway, New York.	A April 15. 1884 M Oct. 21, 1884
HERING, CARL	Consulting Electrical Engineer, 3816 Spring Garden St., Philadelphia, Pa	A Jan. 3, 1888 M June 5, 1888
HERZOG. DR. F. BENEDICT	(*Manager*) President Herzog Teleseme Co., 30 Broad St., New York.	A May 24, 1887 M July 12. 1887
HIGGINS, EDWARD E.	Electrical Engineer, Edison Building, Broad Street, New York. P. O. Box 3067, New York City.	A June 8, 1887 M July 12, 1887

Name.	Address.	Date of Membership.
HOUSTON, PROF. EDWIN J.	1521 Mt. Vernon St., Philadelphia, Pa.	A April 15, 1884 M Oct. 21, 1884
HOWELL, JOHN W.	Electrician, Edison Lamp Co., Harrison N. J.	A July 12, 1887 M June 5, 1888
HOWELL, WILSON S.	Electrical Expert, 167 Warren St., Brooklyn, N. Y.	A Sept. 3, 1889 M Mar. 18, 1890
HUNTER, RUDOLPH M.	Mechanical and Elect'al Engineer, 926 Walnut St., Philadelphia, Pa.	A July 13, 1886 M May 17, 1887
HUTCHINSON, DR. CARY T.	Electrical Engineer, 56 West 25th St., New York City.	A Feb. 7, 1890 M Dec. 16, 1890
HYDE, JEROME W.	Springfield, Mass.	A June 8, 1887 M Nov. 1, 1887
JACKSON, DUGALD C.	District Engineer, Edison General Electric Co., Rialto Building, Chicago, Ill.	A May 3, 1887 M June 17, 1890
JACKSON, FRANCIS E.	With Edison Lamp Co, Harrison, N. J.	A Jan. 3, 1888 M June 17, 1890
JANNUS, FRANKLAND	Solicitor of Patents, 928-30 F. St Washington, D. C.	A Nov. 12, 1889 M Mar. 18, 1890
JENKS, W. J.	Technical Department, Edison, General Electric Co., 44 Wall Street, New York.	A June 8, 1887 M Nov. 1, 1887
JONES, FRANCIS W.	Assistant Gen'l-Manager and Electrician, Postal-Telegraph Cable Co., 5 Dey St., New York.	A April 15, 1884 M Oct. 21, 1884
KNOWLES, E. R.	Civil, Electrical, and Mechanical Engieeer, 181 Broadway, N. Y. and 439*a* Waverly Ave., Brooklyn, N. Y.	A June 8, 1887 M July 12, 1887
KNUDSON, A. A.	Electrican, 39 Nassau St., New York.	A Dec. 6, 1887 M Jan. 3, 1888
LANGE, PHILIP A.	Superintendent of Detail Department, Westinghouse Electric Co., Pittsburgh, Pa.	A Mar. 6, 1888 M June 5, 1888
LANGTON, JOHN	General Manager, Canadian Edison M'f'g Co., Sherbrooke, P. Q.	A Mar. 6, 1888 M June 5, 1888
LATTIG, J. W.	General Manager, National Switch and Target Co. South Easton, Pa	A June 8, 1887 M July 12, 1887
LAWSON, A. J.	Electrical Engineer and Contractor, Montreal, P. Q, Box 1009	A Mar. 18, 1890 M June 17, 1890
LEONARD, H. WARD	(*Manager*). General Manager, Edison General Electric Co, P. O. Box 3067, New York.	A July 12, 1887 M Sept. 6, 1887
LEONARD. M. B.	Electrical Engineer, and Supt. of Telegraph, Chesapeake & Ohio R'y. Co, Richmond, Va.	A Nov. 6, 1886 M May 1, 1888
LIEB, JOHN W., JR.	Chief Engineer, Società Generale Italiana di Elettricita (Sistema Edison). Via S. Radigonda N. 4, Milan, Italy.	A Sept. 6, 1887 M Nov. 1, 1887
LOCKWOOD, THOMAS D.	(*Manager*). Electrical Engineer. and Advisory Electrician. P. O., Drawer 2, Boston, Mass.	A April 15, 1884 M Oct. 21, 1884
LYNE, LEWIS F.	Mechanical and Elect'al Engineer, 307 Grove St., Jersey City, N. J.	A Jan. 3, 1888 M June 5, 1888
MAILLOUX, C. O.	Consulting Electrical Engineer, 32 Liberty St., New York.	A April 15, 1884 M Oct. 21, 1884

Name.	Address.	Date of Membership.
MARKS, WILLIAM DENNIS,	*Ph. B., C. E.* Edison Electric Light Co., Philadelphia, Pa.	A Feb. 7, 1888 M May 1, 1888
MARSHALL, J. T.	Inspector of Lamp Manufacture, Edison Lamp Co., Harrison, N.J.	A Oct. 1, 1889 M Nov. 12, 1889
MAYNARD, GEO. C.	Electrical Engineer, 1409 New York Ave., Washington, D. C.	A April 15, 1884 M Dec. 9. 1888
MILLIS, JOHN	Lieutenant of Engineers, U. S. Army, P.O. Drawer 432. New Orleans, La.	A July 7, 1884 M Mar. 3, 1885
MILLS, FRANK P.	Superintendent Cleveland Iron Mining Co., Ishpeming, Mich.	A Jan. 6, 1885 M Mar. 3, 1885
NICHOLS, EDWARD L.	(*Vice-President*). Professor of Physics at Cornell University, Ithaca, N. Y	A Oct 4, 1887 M Dec. 6, 1887
PAINE, SIDNEY B.	Electrical Constructor, member of firm "Paine & Francis," 38 Pearl St., Boston, Mass.	A June 8, 1887 M Nov. 1, 1887
PARKS, C. WELLMAN	Electrician 1825 Fifth Ave., Troy, N. Y	A July 12, 1887 M May 1, 1888
PARSHALL, H. F.	Electrician, The Wenstrom Consolidated Dynamo and Motor Co., 7 N. Calvert Street Baltimore, Md.	A Sept. 7, 1888 M Mar. 18, 1890
PATTEN, F. JARVIS	Electrical Engineer, 47 Barclay St., Residence. 10 West Thirtieth St., New York.	A Sept. 6, 1887 M Nov. 1, 1888
PERRINE, FREDERIC A. C.	Superintendent Insulated Wire Dep't. John A. Roebling's Sons Co., 137 E. State St., Trenton, N J.	A Sept. 16, 1890 M Dec. 16, 1890
PFANNKUCHE, GUSTAV	Engineer and Inventor, Cleveland, O	A Feb. 7, 1888 M May 1, 1888
PICKERNELL, F. A.	Sup't. of Equipment, Amer. Tel. & Tel. Co., 18 Cortlandt St. N. Y.	A Feb. 7, 1890 M Mar. 18, 1890
POPE, FRANKLIN L.	(*Past President*). Consulting Electrical Engineer and Expert, 15 Wall St., N. Y. Residence, Elizabeth, N. J.	A April 15, 1884 M Oct. 21, 1884
PORTER, J. F.	50 Broadway, New York City.	A Sept. 6, 1887 M Nov. 1, 1887
PRATT, J. HOWARD, JR.	Professor of Physics, Milwaukee Acad., Milwaukee, Wis.	A June 5, 1888 M Sept. 7, 1888
PRATT, ROBERT J.	Electrician. Manager, Electric M'f'g Co., Troy, N. Y.	A July 12, 1887 M Sept. 6, 1887
PRESCOTT, GEO. B., JR.	(*Manager*). Electrical Engineer, General Agent, Day's Kerite Wire and Cables. 16 Dey Street. New York.	A July 12, 1887 M Nov. 1, 1887
RAYMOND, CHAS. W.	Civil and Electrical Engineer, Merrimac Consolidated Mining Co., Platoro, Conejos Co., Col.	A June 8, 1887 M May 17, 1887
RECKENZAUN, ANTHONY	Electrical Engineer, 7 Albert Terrace, Hemberton Road, Stockwell. London, S. W. England.	A Nov. 1, 1887 M Dec. 6, 1887
RECKENZAUN, FREDERICK,	Electrician, Box 225. West Hoboken, N. J.	A Mar. 6, 1888 M June 5, 1888

Name.	Address.	Date of Membership.
RICE, E. WILBUR, JR.	General Superintendent and Consulting Electrician, Thomson-Houston Elec. Co., Lynn, Mass.	A Dec. 6, 1887 M Jan. 3, 1888
RIES, ELIAS E.	Electrician and Electrical Engineer, 430 South Broadway, Baltimore, Md.	A July 12, 1887 M Sept. 6, 1887
ROBERTS, E. P.	Electrician and Sup't, Swan Lamp Co., Belden St., Cleveland, O.	A Jan. 6, 1885 M Feb. 3, 1885
ROHREK, ALBERT L.	Electrical Engineer, with Thomson-Houston Electric Co., Lynn, Mass.	A Nov. 1, 1887 M May 1, 1888
SALOMONS, *Sir* DAVID LIONEL, *Bart. M. A.*,	Engineer and Barrister, Broomhill, Tunbridge Wells, Kent. and 49 Grosvenor St., London, W., England.	A Feb. 7, 1888 M May 1, 1888
SCHLESINGER, WM. M. **	Electrical Engineer, Edison Gen'l Electric Co., Box 3067, N. Y.	A Nov. 1, 1887 M Dec. 6, 1887
SCHULZE-BERGE, FRANZ	Edison Laboratory, Orange, N. J.	A Nov. 12, 1889 M Mar. 18, 1890
SHALLENBERGER, O. B.	Electrician, Westinghouse Electric Co., Pittsburgh, Pa.	A Sept. 7, 1888 M Dec. 4, 1888
SHEPARD, WM. E.	Electrician Salt Lake Rapid Transit Co., Salt Lake City, Utah.	A Feb. 7, 1890 M Mar. 18, 1890
SLATER, HENRY B.	Manager and Sup't, The Canon City Electric Light and Power Co., Canon City Col.	A April 15, 1884 M Dec. 9, 1884
SMITH, HERBERT G. *	General Electrician, Quezaltenango, Guatémala.	A Mar. 6, 1888 M June 5, 1888
STANDFORD, WILLIAM *	Ass't Sup't Telegraphs, Colonial Gov't, Cape Town, Cape of Good Hope, Africa.	A Oct. 4, 1887 M Dec. 6, 1887
STEBBINS, THEODORE	Electric Railway Inspector, Thomson-Houston Elec. Co, 620 Atlantic Ave., Boston, Mass.	A July 9, 1889 M June 17, 1890
STIERINGER, LUTHER	Electrical Expert, 44 Wall St., Room 71, New York.	A June 8, 1887 M Nov, 1, 1887
TERRY, CHARLES A.	Lawyer, Westinghouse Electric Co, Pittsburgh, Pa.	A April 5, 1887 M May 17, 1887
THOMPSON, EDWARD P.	Consulting Electrician and Patent Attorney in Electrical Cases, 5 Beekman St., New York.	A April 15, 1884 M Dec. 3, 1889
THURNAUER, ERNST	Chief Engineer, Thomson-Houston International Elec. Co., Michaelisbrücke, 1, Hamburg, Germany	A Oct. 14, 1887 M Dec. 6, 1887
TROWBRIDGE, PROF. W. P.	School of Mines, Columbia College, New York.	A April 15, 1884 M Oct. 21, 1884
TURNER, WILLIAM S.	Electrical Engineer, Woodbridge & Turner, 74 Cortlandt St., New York.	A Dec. 7, 1886 M Oct. 2, 1888
VAIL, J. H.	Ass't Engineer in Chief, Edison General Electric Co., Edison Building, P. O. Box 3067, N. Y.	A June 8 1887 M Nov. 1, 1887
VAN DEPOELE, CHARLES J.	Electrician, Electrical Railway Department, Thomson-Houston Electric Co., Lynn, Mass.	A June 5, 1888 M Sept. 7, 1888
VANSIZE, WILLIAM B.	Solicitor of Patents, 44 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884

Name.	Address.	Date of Election.
WADDELL, MONTGOMERY	Engineer, 18 Columbia Heights, Brooklyn, N. Y.	A Feb. 7, 1888 M May 1, 1888
WALKER, SYDNEY F.	Electrical Engineer, 195 Severn Road, Cardiff, England.	A June 2, 1885 M May 17, 1887
WALDO, DR. LEONARD *	Electrical Engineer, The Aluminum Brass & Bronze Co., Bridgeport, Conn.	A June 5, 1888 M Dec. 4, 1888
WEAVER, W. D.	Hall Building, Troy, N. Y.	A May 17, 1887 M May 17, 1887
WEBB, HERBERT LAWS	Assistant Electrician, The Metropolitan Telephone and Telegraph Co., 18 Cortlandt, and 159 W. 94th St., N. Y. City.	A Oct. 21, 1890 M Dec. 16, 1890
WEEKS, EDWIN R.	General Manager, Kansas City Electric Light Co., National Bank of Kansas City Building. Kansas City, Mo.	A Sept. 6, 1887 M Nov. 1, 1887
WESTON, EDWARD	(*Past President* and *Vice-President*). Electrician, 645 High St., Newark, N. J.	A April 15, 1884 M Oct. 21, 1884
WETZLER, JOSEPH	(*Vice-President.*) Editor *Electrical Engineer*, 150 Broadway, N. Y.	A April 15, 1884 M Dec. 9, 1884
WHARTON, CHAS. J.	82 Bond St., London England.	A Jan. 3, 1888 M May 1, 1888
WHEELER, SCHUYLER S., *Sc.D.*	(*Vice-President*). President Crocker-Wheeler Electric Motor Co., 430-432 West Fourteenth St., Electrical Expert, Board of Electrical Control, 1266 Broadway, New York.	A June 2, 1885 M Sept. 1, 1885
WILKES, GILBERT	Edison General Electric Co., Edison Building, Box 3067, N. Y. City.	A Jan. 7, 1890 M Mar. 18, 1890
WILSON, FREMONT *	Electrician, 293 Lenox (6) Ave., New York.	A Mar. 6, 1888 M June 5, 1888
WINCHESTER, A. E.	Designer of Steam Electrical Plants, Wilton, Conn.	A June 8, 1887 M Nov. 1, 1887
WOLCOTT, TOWNSEND	Consulting Electrician, 849 Greene Ave., Brooklyn, N. Y.	A Mar. 6, 1888 M Dec. 16, 1890
WOODBRIDGE, J. L.	Electrical Engineer, Woodbridge & Turner, 74 Cortlandt St., New York,	A June 8, 1887 M Nov. 1, 1887
ZETSCHE, DR. CARL EDUARD,	Telegraph Engineer, Carlstrasse 8, II Dresden, N. Saxony.	A Nov. 1, 1887 M Jan. 3, 1888

Members, - - - 157.

ASSOCIATE MEMBERS.

Name.	Address.	Date of Election.
ABERNETHY, J. P.	Superintendent of Telegraph, 53 City Hall, Cleveland, O.	July 7, 1884
ABBOTT, ARTHUR V.	Mechanical Engineer, United Electric Traction Co., Closter, N. J.	Oct. 21, 1890
ALEXANDER, P. H.	President, Alexander, Barney and Chapin, 20 Cortlandt St., New York City.	Dec. 16, 1890

Name.	Address.	Date of Election
ANDERSON, ALEXANDER *	Superintendent and Manager of the Thomson-Houston Electric Co., Norfolk, Va.	Sept. 6, 1887
ANDREWS, WM. S.	Supt. Construction Dept., Edison General Electric Co., Edison Building, Box 3067, New York.	Mar. 5, 1889
ATWOOD, GEORGE F.	Edison Laboratory, Orange, N. J.	Sept. 16, 1890
BACKSTROM, CHAS. A.	Manufacturer of Electric Incandescent Lamps, 154 & 156 West Twenty-seventh St. New York.	Nov. 13, 1888
BAILLARD, E. V.	363 Manhattan Ave., New York.	Dec. 3, 1889
BARTON, ENOS M.	President Western Electric Co., 227 South Clinton St., Chicago, Ill.	July 12, 1887
BARRETT, JOHN A.	Electrician, 189 Montague St., Brooklyn, N. Y.	June 8, 1887
BATES, D. H.	Vice-President and Gen'l Manager, The Electrical Accumulator Co., 44 Broadway, New York.	April 15, 1884
BATES, F. C.	Electrical Engineer, with Thomson-Houston Electric Co., Lynn, Mass.	Jan. 20, 1891
BAUER, A. H.	Electrical Engineer, Pullman Palace Car Co., Pullman Building, Chicago, Ill. Room 307.	Feb. 7, 1890
BAUER, W. F.	Constructionist, The Electrical Accumulator Co., 62 Steuben St., East Orange, N. J.	April 15, 1890
BAYLES, ROBERT N.	Electrician, The "C & C" Electric Motor Co., 404 Greenwich St., New York.	Oct. 1, 1889
BEATTIE, JOHN, JR.	Manager and Superintendent, The Beattie Battery, Zinc and Electric Co., Fall River, Mass	Sept. 6, 1887
BELDING, WARREN S.	Electrician and Sup't. The Belding Motor and Mfg. Co., 6423 Stewart Boulevard, Englewood, Ill	April 15, 1890
BENBOW, WILLIAM C.	419 Beale Street, Memphis, Tenn.	Dec. 3, 1889
BENNETT, J. C.	Electrician, United Edison Mfg. Co. 44 Broad St., New York.	Mar. 18, 1890
BERHGOLTZ, HERMAN	General Manager, The Wightman Elec Mfg. Co., 4 Commonwealth Bldg., Scranton, Pa.	April 2, 1889
BERLINER, EMILE	Inventor, Columbia Road, between Fourteenth and Fifteenth Sts., Washington, D. C.	April 15, 1884
BLACK, CHAS. N.	1113 Wilson Avenue, Cleveland, O.	Feb. 7, 1890
BLAKE, HENRY W.	The Street Railway Publishing Co., World Building, New York City.	Nov. 13, 1888
BLISS, DONALD M.	Electrician, The Canada Electric Co., Amherst, N. S.	Feb. 7, 1890
BLISS, WM. J. A.	Assistant in Practical Electricity, Johns Hopkins University, Baltimore, Md.	Jan. 20, 1891

Name.	Address.	Date of Election.
BLOOD, W. HENRY, JR.	N. W. T. H. E. Co., Pray Building Minneapolis Minn.	April 2, 1889
BOGART, A. LIVINGSTON	Electrical and Patent Expert, 22 Union Square, New York,	July 10, 1888
BOGUE, CHARLES J.	165 West Eighteenth St., New York,	Dec. 3, 1889
BOTTOMLEY, HARRY	Electrical Engineer, Box 3100, Denver, Col.	April 2. 1889
BOYNTON, EDWARD C.	Care of Elektron M'f'g Co., 79–81 Washington St., Brooklyn, N. Y.	Aug. 6, 1889
BRACKETT, PROF. CYRUS F.	Princeton, N. J.	April 15, 1889
BRADDELL, ALFRED E.	Electrical Inspector, Underwriters' Association, Middle Dep't, 308 Walnut St., Philadelphia, Pa.	Sept. 16, 1890
BRADLEY, FRED. W.	27 Front St., Schenectady, New York.	May 20, 1890
BRADY, PAUL T.	Superintendent, Central N. Y. Telephone & Telegraph Co., Cooperstown, N. Y.	July 12, 1887
BRINER, C. J.	Vice-President, Central Electric Construction Co , 515 Walnut St., St. Louis, Mo.	April 2, 1889
BROPHY, WILLIAM	Chief Inspector, Electric Mutual Insurance Co., 85 Water St., Room 50, Boston.	Mar. 5, 1889
BROWN, ALEX. S.	Electrical Engineer, Supt. U. S. Aluminium Co., Boonton, N. J.	Jan. 7, 1890
BROWN, ALFRED S.	Electrical Engineer, Western Union Telegraph Co., 195 Broadway, New York City.	Mar. 18, 1890
BROWN, CHARLES A.	Manager Western Electric Co., 227 South Clinton St., Chicago, Ill	July 12, 1887
BROWNING, HOWARD L.	Promoter and Contractor, 41 Dey St., New York.	Dec. 6, 1887
BUCKINGHAM, CHAS. L.	Patent Attorney, Western Union Telegraph Co., 195 Broadway, P. O Box 3393, New York.	April 15. 1884
BULKLEY, J. NORMAN	Thomson-Houston Electric Co., 620 Atlantic Ave., Boston, Mass.	Oct. 21, 1890
BUNCE, THEODORE D., JR.	Battery Expert, The Julien Electric Traction Co., 239 East 27th St., New York City.	May 20, 1890
BURNS, ELMER Z.	Consulting Electrical Engineer, Room 55, 4th Floor. 120 Broadway, N. Y.	Feb. 7, 1890
BUYS, BERT.	Electrician, Rutherford B. S. & C. Elec. Co., Rutherford, N. J.	Feb. 7, 1890
CAHOON, JAS. B.	Electrical Engineer, Thomson-Houston Electric Co., 257 Washington St., Lynn, Mass.	June 17, 1890
CALDWELL, EDWARD	Assistant Editor, *Electrical World*, 167 Times Building, New York City.	Jan. 20, 1891
CARTY, J. J.	Electrician, Metropolitan Telephone and Telegraph Co., 18 Cortlandt St., New York.	April 15, 1890
CASE, WILLARD E.	6 Fort St., Auburn, N. Y.	Feb. 7, 1888
CHAMBERLAIN, F. H.	Electrician. Metropolitan R. R. Co., 2411 P St., N. W. Washington, D. C.	June 17, 1890

Name.	Address.	Date of Election.
CHANDLER, CHARLES F.	Professor of Chemistry, Columbia College, and Prof. of Chemistry and Physics, College of Physicians and Surgeons, New York City.	Jan. 20, 1891
CHENEY, FREDERICK A.	Sec'y, Treas'r and General Manager, The Elmira Illuminating Co., Elmira, N. Y.	Oct. 1, 1889
CHERMONT, ANTONIO LEITE,	Manager Telephone Co. of Para, Para, U. S. of Brazil, Care Herbst Bros, Box 1377, New York.	Mar. 18, 1890
CHILD, FRANK W.	Contractor and Builder of Electric Railways, 115 Broadway, New York.	July 10, 1888
CHILDS, W. H.	Bookkeeper for The Estey Organ Co., Brattleboro, Vt.	Sept. 6, 1887
CHINNOCE, C. E.	Edison General Electric Co., Edison Building, P. O. Box 3067, New York.	April 15, 1884
CHUBBUCK, H. EUGENE	The New Omaha Thomson-Houston Electric Co., Omaha, Neb.	Dec. 4, 1888
CHURCHILL, ARTHUR.	Electrical Expert, Frazar & Co., Yokohama, Japan.	April 15, 1890
CLEVELAND, WM. B.	Electrical Engineer, 309 Perry-Payne Building, Cleveland, O.	April 15, 1884
COBB, JOHN S.	Electrician. Care of Bergmann & Co. 537 W. 34th St., New York.	June 17, 1890
COFFIN, CHAS. A.	Vice-President and Treasurer, Thomson-Houston Electric Co., 620 Atlantic Ave., Boston, Mass.	Dec. 6, 1887
COLGATE, GEO. L.	Electrical Engineer, Bedford Electric Co., Bedford City, Va.	June 17, 1890
COLLEY, BENJAMIN W.	First Ass't. Superintendent, The Commercial Cable Co, Hazel Hill, N. S.	Oct. 21, 1890
COLLINS, W. FORMAN **	Western Manager, *The Electrical Engineer*. 225 Dearborn St., Chicago. Ill.	Dec. 6, 1887
COMPTON, ALFRED G.	Professor of Physics, College of the City of New York, 17 Lexington Ave., New York.	Nov. 1, 1887
CORNELL, CHAS. L.	Electrical Engineer, Western Engineering Co., Hamilton, O.	Feb. 7, 1890
CRANE, W F. D.	Electrician and Mechanical Engineer, The Electric Car Co. of America, 308 S. 10th Street, Philadelphia, Pa.	Feb. 7, 1888
CROSBY, OSCAR T.	General Manager Railway Dep't'ment, Thomson-Houston Electric Co., 620 Atlantic Ave, Boston, Mass.	Mar. 18, 1890
CUNTZ, JOHANNES H.	Assistant to Pres't Henry Morton, Stevens Institute of Technology, 137 Hudson St, Hoboken, N. J.	Mar. 5, 1889
CURTIS, CHAS. G.	114 East Thirtieth St., New York.	April 15, 1884
CURTISS, GEORGE F.	Electrician, Thomson-Houston Electric Co., 234 Montgomery St., San Francisco, Cal.	April 2, 1889
CUSHMAN, HOLBROOK	Electrical Engineer, 337 West Twenty-second St., New York.	June 5, 1888

Name.	Address.	Date of Election.
CUTTER, GEORGE	Dealer in Electrical Supplies, 192 Fifth Avenue, Chicago, Ills.	June 17, 1890
DANA, R. K.	Agent Washburn and Moen M'f'g Co., 16 Cliff St., New York.	April 15. 1884
DANFORTH, A. H. **	Great Falls, Montana.	July 12, 1887
DANIELL, FRANCIS G.	Representative Short Electric Railway Co., 111 Dartmouth St., Boston Mass.	Nov. 12, 1889
DAVENPORT, GEORGE W.	General Manager, Thomson-Houston International Electric Co , 620 Atlantic Ave., Boston, Mass.	June 4, 1889
DAVIDSON, EDW. C.	Patent Lawyer, Room 179, Times Bldg., New York.	Feb. 7, 1890
DAVIS, CHAS. M.	Superintendent, Light, Heat & Power Co , Pueblo, Col.	July 12, 1887
DAVIS, DELAMORE L.	Superintendent, Salem Electric Light & Power Co., Salem, O.	April 2, 1889
DAVIS, JOSEPH P.	Consulting Engineer, Care of Phœnix Construction Co., 115 W. 38th St., New York City.	April 15, 1884
DAVIS, MINOR M.	Ass't Electrician, Postal Telegraph Cable Co , 5 Dey St., New York.	April 6, 1886
DELANY, PATRICK BERNARD, (*Manager*).	Inventor, South Orange, N. J.	April 15, 1884
DENTON, JAMES E.	Professor of Experimental Mechanics, Stevens Institute of Technology, Hoboken, N. J..	July 12, 1887
DICKERMAN, GEORGE W.	Ass't. to General Manager, Eureka Electric Co., 173 Fifth Ave., New York City.	Nov. 18, 1890
DICKERSON, E. N.	Attorney-at-Law, 15 Wall St., N. Y.	April 15, 1884
DION, ALFRED A.	Electrician, Intercolonial Railway, Moncton, N. B.	Jan. 7, 1890
DOANE, S. EVERETT	Thomson-Houston Electric Co., Swampscott, Mass.	Aug. 6, 1889
DOBBIE, ROBERT S.	Electrician, 132 Jackson Ave., Jersey City, N. J.	Feb. 5 1889
DOREMUS, CHARLES A.	*M. D. Ph. D.* Chemist and Physicist, Bellevue Hospital Medical College, College of the City of New York and American Veterinary College, 92 Lexington Ave., New York.	July 7, 1884
DRESSLER, CHARLES E.	Maker of Scientific and Electrical Apparatus, College of the City of New York, 17 Lexington Ave., New York City,	Dec. 16, 1890
DUNDERDALE, CLEAVELAND F.	Agent Westinghouse Electric Co., 146 Adams St., Chicago, Ill.	June 17, 1890
DURANT, GEO. F.	Vice Pres't of Bell Telephone Co. of Mo., 322 Pine St., St. Louis, Mo.	April 15, 1884
EKSTROM, AXEL	Electrician, Thomson-Houston Electric Co., Lynn, Mass.	June 17, 1890
ELEY, HARRIS H.	Electrical Workshop Sup't. W. C. & S. W Telephone Co., 88 Colston St., Bristol, Eng.	Jan. 7, 1890

Name.	Address.	Date of Election.
ELMER, WILLIAM, JR.	Under-graduate in Electrical Engineering. Princeton University, Princeton, N. J.	Mar. 18, 1890
EMMET, HERMAN L. R.	Publisher and Printer, 36 Cortlandt St., New York.	April 15, 1884
ENTZ, JUSTUS B.	Electrical Engineer, 18 Columbia Heights, Brooklyn, N. Y.	Jan. 7, 1890
EUSTIS, HERBERT H.	President and Electrician, Eastern Electric Cable Co., 61 Hampshire St., Boston, Mass.	April 15, 1890
FIELDING, FRANK E.	Chemist and Assayer, Virginia City, Nev.	Sept. 6, 1887
FISCHER, GUSTAVE J.	Engineer for Tramway Construction, Public Works Department, Sydney, N. S. W.	Jan. 20. 1891
FISKE, HENRY G.	Electrician, Croton Magnetic Iron Mines. 45 East Twenty-second Street, New York	Nov. 12 1889
FISKE, J. P. B.	Electrical Engineer, Thomson-Houston Electric Co., Lynn, Mass.	June 17, 1890
FITCH, GRAHAM D.	First Lieut. Corps of Engineers, U. S A. Duluth, Minn.	Oct. 21, 1890
FLACK, J. DAY	Ass't Electrician in charge of Tests, Edison Lamp Co , Harrison, N. J.	Dec. 6, 1887
FLEMING, WALTER M. *M. D.* *	Vice-President of the Averell Insulating Conduit Co., 45 Broadway, Room 1, New York.	Jan. 3, 1888
FLOOD, J. F.	Electrician, Electric Light & Power Co , Steubenville, O.	Mar. 18, 1890
FORBES, FRANCIS	Lawyer, 137 Broadway. New York City.	Sept. 16, 1890
FORD, ELLSWORTH	Superintendent Edison Electric Light Co., Ottumwa, Ia.	July 12, 1887
FOX, JOHN M.	Electrician, Edison General Electric Co., 133 West 34th Street, N. Y.	Mar. 18, 1890
FRANCISCO, M. J.	President and General Manager, Rutland Electric Light Co., Rutland, Vt.	June 17, 1890
FREEDMAN, WILLIAM H.	Honorary Fellow in Electrical Engineering, Columbia College. 120 West 125th Street, New York.	Mar. 18, 1890
FRENCH, E. L.	Draughtsman, Mather Electric Co., Manchester, Conn.	Dec. 16, 1890
FULLER, LEVI K.	Vice-President, Estey Organ Co., Brattleboro, Vt.	Mar. 5, 1889
GAINES, J. D.	Second Ass't. Superintendent, The Commercial Cable Co., Hazel Hill, N. S.	Oct. 21, 1890
GILES, WALTER A	Electrical Engineer, Mill and Mine Elec. Equipment Co., 95 Fifth Ave., Pittsburgh, Pa.	Nov. 1, 1887
GILLILAND, E. T.	Vice-Pres't Empire City Elec Co., 15 Dey St. Residence, 179 West End Ave., New York.	April 15, 1884
GOLDMARK, CHAS. J.	473 Park Ave., New York.	June 5, 1888

Name.	Address.	Date of Election.
GORTON, CHARLES	Lock Box 35, Greencastle, Pa.	Nov. 12, 1889
GRAY, W. N.	Electrical Engineer, 12 Chamber of Commerce, Cincinnati, O.	Oct. 1, 1889
GROWER, GEORGE G.	Electrician and Chemist, Ansonia Brass and Copper Co., Ansonia, Conn.	Mar. 18, 1890
GRIFFIN, CAPT. EUGENE	Thomson-Houston Elec. Co., 620 Atlantic Ave., Boston. Mass.	Feb. 7, 1890
GUTMANN, LUDWIG	Electrical Engineer, P. O. Box 560, Pittsburgh, Pa.,	Sept. 14, 1888
HALL, EDWIN H.	Assistant Professor of Physics, Harvard College, 5 Avon St., Cambridge, Mass.	Sept. 3, 1889
HALL, WILLIAM P.	President, The Hall Signal Co., 50 Broadway. New York City.	Sept. 16. 1890
HANDLEY, ARTHUR	Electrical Engineer, Electrical Engineering Co. of Ireland, Limited, 61 Dawson St., Dublin, Ireland.	Dec. 16, 1890
HARDING, H. McL.	Railway Dep't, Westinghouse Electric Co., Pittsburgh, Pa.	May 24, 1887
HARVEY, WIRT B. *	43½ Madison St., Memphis, Tenn.	Dec. 6, 1887
HASKINS, CARYL D.	Electrician, Thomson-Houston Electric Co., Lynn, Mass.	Mar. 18, 1890
HASSON, W. F. C.	Assistant Engineer, U. S. N. Instructor. Johns Hopkins University. Baltimore, Md.	Mar. 18, 1890
HATZEL, J. C.	Electrical Engineer and Contractor, 29 West Twenty-sixth St., New York.	Sept. 3, 1889
HALSEY, WILLIAM B.	Inspector, Postal Telegraph-Cable Co., 94 Leonard St., New York.	Mar. 18, 1890
HENDERSON, ALBERT H.	Ries and Henderson, 45 Chamber of Commerce, Baltimore, Md.	July 12, 1887
HEILMAN, DONALD B.	Jonestown, Pa.	Mar. 18, 1890
HEINRICH, RICHARD O	Demonstrator in Electrical Engineering and Physics, Lehigh University, South Bethlehem, Pa.	Oct. 1, 1889
HENSHAW, FREDERICK V.	Assistant Electrician, The "C.& C." Electric Motor Co., 402 Greenwich St , New York.	Feb. 5, 1889
HEWITT, CHARLES	Engineering Dep't, Edison General Electric Co., Edison Building, New York, 273 Hicks St., Brooklyn, N. Y.	Sept. 16. 1890
HOCHHAUSEN, WILLIAM	Electrician, The Excelsior Electric Co., 196 Willoughby St., Brooklyn, N. Y.	April 15, 1884
HOFFMAN, SAMUEL V.	Post-graduate Student, Johns Hopkins University, Baltimore, Md.	Jan. 20, 1891
HOLCOMB, EUGENE R.	Electrician, Agency Thomson-Houston Electric Co., 234 Montgomery St., San Francisco, Cal.	June 17, 1890
HOLT, MARMADUKE BURRELL.	Aspen Mining and Smelting Co., Aspen, Col.	April 15, 1890
HOPKINS, J. HERBERT	403 North 8th St., St. Louis, Mo.	April 2, 1889

Name.	Address.	Date of Election.
HOWSON, HUBERT	Patent Lawyer, 38 Park Row, New York.	June 8, 1887
HUBRECHT, DR. H. F. R.	Director, Nederlandsche Bell Telephone Co., Amsterdam, Holland.	Oct. 4, 1887
HUMPHREYS, C. J. R.	Manager, Lawrence Gas Co., Lawrence, Mass	Sept. 6, 1887
IDELL, FRANK E.	Mechanical Engineer, 41 Dey St., New York.	July 12, 1887
IHLDER, JOHN D.	Electrical Engineer, with Osterheld & Eickemeyer, Manuf'rs of Dynamos and Motors, Yonkers, N. Y.	Oct. 2, 1888
INSULL, SAMUEL	Electrical Manufacturer, 44 Wall St., New York.	Dec. 7, 1886
ISELIN, HENRY S.	President, Gibson Electric Co., 74 Cortlandt St., New York	June 2, 1885
IVES, EDWARD B.	Lieutenant U. S. A., Electrical Engineer, 47 Barclay St., Residence, One hundred and thirty-ninth St. and Grand Boulevard New York.	April 2, 1889
IZARD, E. M.	Electrical Engineer, General Manager, Inter-State Cooling Co, 167 Dearborn St., Chicago, Ill.	Mar. 5, 1889
JACKSON, C. H.	President, United Electric Light and Power Co., 59 Liberty St., New York.	May 24, 1887
JAEGER, H. J. **	Chemical, Physical and Electrical Glass Blowing, 173 Pearl St., Brooklyn, N. Y.	July 12, 1887
JOHNSTON, W. J.	President, The W. J. Johnston Co., Ltd., Times Building, P. O. Box 3332, N. Y.	April 15, 1884
JONES, F. R.	University of Tennessee, Knoxville, Tenn.	May 20, 1890
JONES, SEBASTIAN C. **	Electrical Engineer, Aurora, N. Y.	Sept. 6, 1887
JUDSON, WM. PIERSON,	U. S. Civil Engineer, Oswego, N. Y.	June 8, 1887
KEEN, WILLIAM M. B.	Electrician, The Clark Electric Co., Co., 478 Pearl St., and 410 East 26th Street New York City.	Sept. 16, 1890
KENNELLY, A. E.	Electrician, Edison Laboratory, Orange, N. J.	May 1, 1888
KERR, THOMAS B.	Attorney-at-Law, 120 Broadway New York.	Nov. 1, 1887
KIMBALL, A. S.	Professor of Physics, Worcester Polytechnic Institute, Worcester, Mass.	Sept. 3, 1889
KINNEY, H. A.	Representative Brush Electric Co., N. Y. Life Ins. Building. Omaha, Neb.	Mar. 18, 1890
KNAPP, ALLAN C. *	Electrician, 225 Dearborn St., Chicago, Ill.	Sept. 6, 1887
KREIDLER, W. A.	Editor and Publisher, *Western Electrician*, 6 Lakeside Building, Chicago, Ill.	Oct. 4, 1887
LAIN, DAVID E., *B. S.*	Electrical Engineer, Yonkers, N. Y.	Nov. 13, 1888
LAW, M. D.	Sup't and Electrician, Denver Consolidated Electric Co., 1534 Lawrence St., Denver, Col,	Feb. 7, 1888

Name.	Address.	Date of Election.
LEDOUX, A. R.	Chemical Expert, 10 Cedar St., New York.	Dec. 7, 1886
LEE, HUNTINGTON	Pittsfield, Mass.	Dec. 3, 1889
LEE, JOHN.	Chemist and Electrician, American Bell Telephone Co., Brookline, Mass.	Mar. 18, 1890
LELAND, H. W. ***	Manager, Telephone Exchange, 259 Washington St, Jersey City, N. J.	April 15, 1884
LEMP, HERMANN, JR.	Electrician, Thomson Electric Welding Co, Lynn, Mass.	April 2, 1889
LEVY, ARTHUR B.	Assistant Engineer, Arc Light Dep't, Edison General Electric Co., 235 E. 50th St., N. Y. C.	Jan. 20, 1891
LEWIS, HENRY FREDERICK WILLIAM.	General Manager and Secretary of the Western Counties South Wales Telephone Co., England, 16 High St, Bristol, Eng.	Mar. 5, 1889
LIEBIG, GUSTAV A., JR.	Elec'l Testing Bureau, Johns Hopkins University, Baltimore, Md.	Mar. 6, 1888
LLOYD, ROBERT MCA.	Electrician of the Marion, N. J. Factory, United Electric Traction Traction Co., 2 W. 36th St., New York City.	Oct. 21, 1890
LOGAN, CHARLES H.	General Manager, Standard Electric Co., Detroit, Mich.	Nov. 18, 1890
LOOMIS, OSBORN P.	Electrician, Eureka Electric Co., 530 Nostrand Ave., Brooklyn, N.Y.	Sept. 16, 1890
LOWREY, GROSVENOR P.	Lawyer, 15 Broad St., Residence 121 Madison Ave., New York.	Nov. 1, 1887
LOZIER, ROBERT T. E.	Electrical Expert, The Edison General Electric Co., Broad Street, Box 3067, New York.	May 20, 1890
LUFKIN, HARVEY L.	General Agent, "C & C" Electric Motor Co., 404 Greenwich St., New York.	June 17, 1890
LUNDELL, ROBERT	Designing Draftsman, Sprague Elec. Ry. Co., 141 East 49th St, New York.	Feb. 7, 1890
MACLILIE, C. H.	Broker in Electrical Securities, 11 Wall St., New York.	July 12, 1887
MAC QUESTEN, W. D.	Electrical Engineer and Contractor, 15 Cortlandt St., New York.	April 15, 1890
MADDEN, O. E.	President, Empire City Electric Co., 15 Dey St., New York.	April 15, 1884
MAGEE, LOUIS J.	Electrical Engineer, in charge of European Office of Thomson-Houston International Electric Co., Michaelisbrücke 1, Hamburg, Gy.	April 2, 1889
MALCOLM, PHILIP S.	Western Agent, Gibson Electric Co., Portland, Oregon.	Mar. 18, 1890
MANSFIELD, GEO. W.	Electrical Engineer, with Thomson-Houston Electric Co, 620 Atlantic Ave., Boston, Mass.	June 2, 1885
MARKS, LOUIS B.	Washington Carbon Co., Washington, Pa.	May 20, 1890
MARTIN, F.	Inspector of Isolated Plants, Edison Electric Illuminating Co., of N. Y. 16 Oak St., Newark, N. J.	Oct 21, 1890

Name.	Address.	Date of Election.
MARTIN, J.	Electrician, Hanson, Van Winkle & Co., 16 Oak St., Newark, N. J.	Oct. 21, 1890
MARTIN, T. COMMERFORD	(*Past President*) Editor, *The Electrical Engineer*, 150 Broadway, New York.	April 15, 1884
MASON, AUGUSTE F.	General Manager, Simplex Electric Co , 620 Atlantic Avenue, Boston, Mass.	June 17, 1890
MAVER, WILLIAM, JR.	(*Manager.*) Electrical Expert, 31 Nassau St., New York.	July 12, 1887
MAVER, GEORGE	Mechanical Draughtsman, Edison General Electric Co., 68 Broad St., New York City.	Dec. 16, 1890
MCCAY, H. K.	Electrician, Consolidated Electric Co. Amsterdam, N. Y.	Sept 16, 1890
MCKIBBIN, GEORGE N.	Chemist and Electrician, 46 West Fifty-first St., New York.	June 8, 1887
MCKINSTRY, J. P.	185 Seneca St., Cleveland, O.	April 15, 1884
MCMAHAN, JOHN M.	Bergen Point, N. J.	Aug. 6, 1889
MERCER, ANDREW G.	Treasurer and Electrician, Waterloo Electric Co., Waterloo, N. Y.	Sept. 3, 1889
MERRITT, ERNEST	Instructor in Physics, Cornell University, Ithaca, N. Y.	Sept 16, 1890
MILLER, JOSEPH A.	Civil and Consulting Engineer, Providence R. I	Dec. , 1884
MILLER, WM. C.	General Manager, Watervliet Turnpike & R. R. Co , 3 South Hawk Street, Albany, N. Y.	Oct. 21, 1890
MINER, W. M.	Electrician and Inventor, 89 East Second St., Plainfield, N. J.	July 12, 1887
MITCHELL, JOHN MURRAY	Lawyer, Box 3712, 45 Wall St., New York.	June 2, 1885
MITCHELL, SIDNEY Z.	Manager, Oregon, Washington and Idaho Agency, Edison General Electric Co , Washington Building, Portland, Or.	Nov. 12, 1889
MIX, EDGAR W.	Electrician, with Thomson-Houston Electric Co.; Lynn, Mass.	Sept. 3, 1889
MOORE, JOHN J	425 E. Twenty-fourth St , New York.	Nov. 12, 1889
MORRISON, J. FRANK	15 South St., Baltimore, Md.	April 15, 1884
MORTON, HENRY, *Ph. D*	President of Stevens Institute of Technology, Hoboken, N. J.	May 24, 1887
MOSES, DR. OTTO A	Electrician, 131 East Seventy-third St., New York.	May 17, 1887
MOSS, GEO. W.	Station Manager, C. & S. A. Tel. Co., Tehuantepec, Mexico.	Jan. 7, 1890
MOSSCROP, WM. A.	Sup't of Construction, Woodbridge & Turner, 29 Clinton Place, Brooklyn, N. Y.	May 7, 1889
MURPHY, WM. F.	Montgomery Light Co., Montgomery, Ala	Dec. 16, 1890
MYERS, GEO. FRANCIS	Post Graduate Student, Cornell University, 69 Heustis St., Ithaca, N. Y.	June 17, 1890
NESMITH, S. D.	Ohio Agent, Edison General Electric Co., 322 Society for Savings Building, Cleveland, O.	Sept. 16, 1890

Name.	Address.	Date of Election.
NEWELL, ARTHUR J.	Electrical Engineer, R. T. Oakes & Co., 184 Beech St., Holyoke, Mass.	Mar. 18, 1890
NICHOLLS, F. VICTOR	Electrician and Manager Vancouver Electric Illuminating Co., Vancouver, B. C.	Dec. 4, 1888
NICHOLS, ARTHUR E.	Student in Electrical Engineering, Columbia College, 16 E. 35th St., New York City.	Mar 18, 1890
NUNN, RICHARD J., *M. D.*	Physician, 119½ York St., Savannah Ga.	July 12, 1887
OATIS, JOHN X.	Manager and Electrician, Amsterdam Electric Light & Power Co., Amsterdam. N. Y.	Sept. 7, 1888
OCKERSHAUSEN, H. A.	Electrical Engineer, 65 Madison Ave., Jersey City, N. J.	Sept. 6, 1887
O'DEA, M.	Electrician, University of Notre Dame, Notre Dame, Ind.	June 8, 1887
OTTEN, DR. JAN D.	Engineer, Thomson-Houston International Electric Co., Michaelsbrucke 1, Hamburg, Germany.	Nov. 18, 1889
OWENS, R. B.	Superintendent, Greenwich Gas and Electric Light Co., Greenwich, Conn.	June 17, 1890
PAINE, F. B. H.	Consulting Electrical Engineer, Chas. Paine & Sons, 71 Broadway, New York City.	Dec. 16, 1890
PALMER, G W , JR.	General Manager, McKeesport Light Co., McKeesport, Pa.	April 15, 1890
PARSELL, HENRY V., JR.	31 East Twenty-first St., New York.	Nov. 12, 1889
PAUL, CHAS. M.	Electrician, Care of Weston Electrical Instrument Co., 645 High St., Newark, N. J.	May 7, 1889
PECK. EDWARD F.	General Sup't Citizens Electric Illuminating Co , Cor. Navy St. and DeKalb Ave., Brooklyn, N. Y.	May 20, 1890
PECK, SAMUEL C.	Electrician, Thomson-Houston Electric Co., 620 Atlantic Ave, Boston, Mass.	Sept 6, 1887
PEIRCE, WM. H.	Superintendent Marine Installations, Edison General Electric Co., Edison Building, P. O. Box 3067, New York.	Sept. 7, 1888
PERKINS, FRANK C,	Student in Electrical Engineering, Cornell University, Ithaca, N. Y.	Oct. 21, 1890
PHELPS, GEO. M.	(*Treasurer*). President, *Electrical Engineer*, 150 Broadway. New York.	April 15, 1884
PHILLIPS, EUGENE F.	M'f'r Insulated Electric Wire, Providence, R. I.	July 13, 1889
POOLE, CECIL P.	Contracting Electrical Engineer, 206–8 Eighth St. Lynchburg, Va.	Jan. 3, 1888
POOR. CHAS. LANE	Tutor, College of the City of New York, 17 Lexington Ave., New York City.	Dec. 16, 1890
PUPIN, DR. MICHAEL I.	Instructor in Mathematical Physics, Columbia College, 68 W. 72d St., New York City.	Mar. 18, 1890

Name.	Address.	Date of Election.
POPE, RALPH W.	Secretary of the American Institute of Electrical Engineers, Editor *Electric Power*, 12 W. 31st St., New York. Residence 570 Cherry St., Elizabeth, N. J.	June 2, 1885
POWELL, WILLIAM H.	Flushing and College Point Railway, Flushing, N. Y.	June 17, 1890
PUTNAM, H. ST. CLAIR	Treasurer and Electrician, Thomson-Houston Carbon Co., Fremont, O.	Sept. 16, 1890
RAE, FRANK B.	Electrical Engineer, Detroit Electrical Works, Detroit, Mich.	April 15, 1884
RANDALL, JOHN E.	Incandescent Lamp Dep't, Thomson-Houston Electric Co., Lynn, Mass.	May 7, 1889
REED, CHAS. J.	Electrician, 224 High St., Orange, N. J.	Mar. 5, 1889
REED, HENRY A.	Secretary and Manager, Bishop Gutta-Percha Co., 422 East Twenty-fifth St., New York.	June 4, 1889
REID, THORBURN	Consulting Electrical Engineer and Expert, 15 Wall and 26 E. 33d Sts., New York City.	Oct. 21, 1890
REILLY, JOHN C.	General Sup't, N. Y. & N. J. Tel. Co, 16 Smith St, Brooklyn, N. Y.	April 15, 1884
REINMANN, A. L.	Electrician, Breckenridge Ave., Pittsburgh, Pa.	June 8, 1887
REIST, H. G.	Electrical Engineer, Thomson-Houston Electric Co., 113 Franklin St., Lynn, Mass.	June 17, 1890
RIKER, ANDREW L.	Electrical Engineer. 15 East Fifty-fifth St., New York.	Nov. 1, 1887
ROBINSON, ALMON,	Draughtsman, Expert in Methods of Gearing, P. O. Box, 943, Lewiston, Me.	Sept. 6, 1887
RODMAN, SAMUEL, JR	Lieut. 1st Artillery, U. S. A. Fort Columbus, N. Y. Harbor.	Sept. 16, 1890
ROEBLING, FERDINAND W.	Manufacturer of Electrical Wires and Cables, Trenton, N. J.	June 8, 1887
ROESSLER, S. W.	Captain, U. S. A., U. S. Engineer Office, Memphis, Tenn.	Dec. 3, 1889
ROGERS, WINFIELD S.	Mechanical Engineer, Estate of F. W. Richardson, Troy, N. Y.	Sept. 3, 1889
ROOME, H. C.	32 Liberty St., New York.	April 15, 1884
ROSENBAUM, WM. A.	Electrical and Patent Solicitor, Care of *The Electrical World*, Times Building, New York.	Jan. 3, 1889
ROSENBERG, E. M.	Supt. Manhattan E. L. Co., 80th St., and Ave. B Residence, 784 Lexington Ave., N. Y. City.	Oct. 21, 1890
ROYCE, FRED W.	Electrician and Patent Solicitor, 1408 Pennsylvania Ave., Washington D. C.	April 15, 1884
RYAN, HARRIS J.	Professor of Electrical Engineering, Cornell University, Ithaca, N. Y.	Oct. 4, 1887
SARGENT, W. D.	General Manager, N. Y. & N. J. Tel. Co., 16 Smith St., Brooklyn, N. Y.	April 15, 1884
SAWYER, FRED[illegible]	381 Boylston St., Boston, Mass.	June 8, 1887

Name.	Address	Date of Election.
SAXELBY, FREDERICK,	Electrical Engineer, Superintendent of Exhausting Department, Edison Lamp Co., Harrison, N. J.	June 5, 1888
SCHMID, ALBERT	Superintendent, Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.	Oct. 21, 1890
SCHMIDT, FREDERICK,	Managing Director, The Schmidt-Douglas Electric Co., L'td., 31 Blenheim Rd., Bradford, England.	Jan. 3, 1888
SEARING, LEWIS	Thomas, Shepard & Searing, 69 Arapahoe Building, Denver, Colorado.	April 3, 1888
SEELY, J. A.	General Manager, Complete Construction Co., 24 Cortlandt St., New York.	April 15, 1884
SERRELL, LEMUEL WM.	Mechanical and Electrical Engineer, 115 Broadway, New York.	Nov. 1, 1887
SHAW, GEORGE B.	General Manager, National Electric Mfg. Co., Eau Claire, Wis.	April 15, 1890
SHERLE, FRANKLIN	Electrical Engineer, Thomson-Houston Electric Co., Lynn, Mass.	Oct. 21, 1890
SHEEHAN, WILLIAM M.	Manager and Electrician, Newburgh Electric Light & Power Co., 65 Montgomery St., Newburgh, N.Y.	Sept. 3, 1889
SHELDON, SAMUEL, *A. M. Ph. D.*	Professor of Physics and Electrical Engineering, Polytechnic Institute, Brooklyn, N. Y., Residence, 20 Sidney Place.	Dec. 16, 1890
SINCLAIR, H. A.	Electrical Engineer. The Tucker Electric Co., 950 Bedford Ave., Brooklyn, N. Y.	June 17, 1890
SISE, CHARLES F.	Vice-President and Managing Director, Bell Telephone Co., of Canada, and Canadian Telephone Co, Ltd., Montreal, Canada	June 8, 1887
SMITH, FREDERICK H.	Civil Engineer. 227 East German St., Baltimore, Md.	Nov. 12, 1889
SMITH, GERRITT	Circuit Electrician, 195 Broadway, P. O. Box 3393, New York.	April 15, 1884
SMITH, J. ELLIOT	Superintendent Fire Alarm Telegraph, 157 East Sixty-seventh St., New York.	April 15, 1880
SMITH, JESSE M.	Consulting Electrical Engineer and Expert in Patent Causes, 36 Moffatt Block, Detroit, Mich.	April 15, 1884
SOUZA, CARLOS MONTEIRO e	Rio de Janeiro, Brazil	Sept. 6, 1887
SPICER, CHAS. W. W.	122 West 21st. St, New York City.	Nov. 12, 1889
SPIKE, CLARENCE J.	Halifax, N. S	Mar. 18, 1890
SPRAGUE, FRANK J.	(*Vice-President.*) Electrical Engineer and Inventor, 277 West 73d St., New York.	May 24, 1887
SPRUSON, WILFRED J.	Member of the firm of Hepburn & Spruson, Consulting Engineers and Electricians, 169 King St., Sydney, Australia.	Dec. 16. 1890
STADELMAN, WM. A.	Vice-Prest. and Chief Engineer, Equitable Elec. Ry. Construction Co., 418 Walnut St, Philadelphia, Pa.	Feb. 7, 1890

Name.	Address	Date of Election.
STANLEY, WILLIAM, JR.	Electrician, Pittsfield, Mass.	Dec. 6, 1887
STEARNS, CHARLES K.	Sup't of Construction, N. W. Thomson-Houston Electric Co., 403 Sibley St., St. Paul, Minn.	Aug. 6, 1889
STEINMETZ, CHARLES	Electrician, Osterheld & Eickemeyer, Yonkers, N. Y.	Mar. 18, 1890
STOCKBRIDGE, GEO. H.	Patent Attorney, and Editor *Electric Power*. 132 Nassau St., New York.	May 24, 1887
STOCKLY, GEO. W.	President, Brush Electric Co., Cleveland, O.	April 15, 1884
STOREY, IMLE E. †	Electrician and Manager, Storey Electric Drill and Power Co., 16 Broad St., New York City.	May 20, 1890
STUART, OTIS K.	Clerk, Thomson Electric Welding Co., Lynn, Mass.	June 4, 1889
STUMP, CLARENCE E.	Vice-President and Business Manager, Street Railway Publishing Co., World Building, New York.	May 17, 1887
SULLIVAN, M. C.	With the *Electrical Engineer*, 150 Broadway, New York City.	Dec. 16, 1890
SWEET, HENRY N.	Chief of Patent Bureau, Thomson Electric Welding Co., 89 State St., Boston, Mass.	May 20, 1890
TABER, ROBERT B.	Secretary and Electrical Engineer, New Bedford Gas Light Co., New Bedford, Mass.	Sept. 16, 1890
TALTAVALL, THOS. R.	Editor, *Electric Age*, World Building, New York City.	Jan. 20, 1891
TAYLOR, CHARLES	Metallurgist. U. S. Assay Office, 30 Wall St., New York.	Nov. 1, 1887
TEMPLE, WILLIAM CHASE *	Electrical Engineer, 575 Madison Ave., New York.	May 3, 1887
TESLA, NIKOLA	Electrical Engineer and Inventor, The Gerlach, 55 West 27th St., New York.	June 5, 1888
THOMPSON, WILLIAM GEO.	MACNEILL, Resident Engineer, Sault Ste Marie Canal, Sault Ste, Marie, Ontario.	July 12, 1887
THOMSON, PROF. ELIHU	(*Past President*). Electrician, Thomson Houston Electric Co., and Thomson Electric Welding Co., Lynn, Mass.	April 15, 1884
TOBEY, WILLIAM BOARDMAN	Pittsfield Electric Light & Power Co., Pittsfield, Mass.	Sept. 16, 1890
TOWNSEND, HENRY C.	(*Manager*). Attorney and Expert in Electrical Cases, 5 Beekman St., New York.	July 10, 1888
TREGONING, JOHN	Sup't, Thomson Electric Welding Co., 325 Boston St., Lynn, Mass.	April 2, 1889
TROTT, A. H. HARDY	Electrical Expert, with Thomson-Houston Electric Co., Lynn. Mass.	Jan. 20, 1891
UEBELACKER, CHAS. F.	Brush Electric Co., and 1299 Euclid Ave., Cleveland Ohio.	Feb. 7, 1890
UMLENHAUT, FRITZ, JR.	Field Engineering Co., 15 Cortlandt St., New York.	May 7, 1889

Name.	Address.	Date of Election.
UPTON, FRANCIS R.	(*Manager*). Treasurer and General Manager, Edison Lamp Co., Harrison, N. J.	May 17, 1887
VAIL, THEO. N.	President, Metropolitan Telephone & Telegraph Co., 18 Cortlandt St, New York	April 15, 1884
VARLEY, RICHARD, JR.	Electrician. Okonite Insulated Wire Co., Passaic, N. J.	Mar. 18, 1890
VAN BRUNT, WALTER	Manager, Duluth Telephone Co., Duluth, Minn.	Sept. 6, 1887
VANCE, A. ST. CLAIR	Edison General Electric Co., Broad St., Box 3067, New York City.	April 2, 1889
VAN TRUMP, C. REGINALD	Wilmington City Electric Co, Wilmington, Del.	Feb. 5, 1889
VAN VALKENBURGH, F. S.	Central and South American Tel. Co., Tehuantepec, Mexico.	June 5, 1886
VAN VLECK, FRANK	Executive Engineer, Pacific Railway Co, Los Angeles, Cal.	Nov. 16, 1886
VIDUARRE, JOSE	Dealer in Electrical Supplies, Ponce, Porto Rico	Sept. 6, 1887
WACKER, GEORGE G.	Electric Organs. 3644 Third Ave., New York.	Sept. 6, 1887
WALLACE, WILLIAM	Wire Manufacturer, Ansonia, Conn.	April 15, 1884
WALTER, HENRY E.	Schenectady, N Y.	April 2, 1889
WARDELL, GEORGE P.	19 Cedar St., Newark, N. J.	Nov 12, 1889
WARING, RICHARD S.	205 Penn Building, Pittsburgh, Pa.	April 15. 1884
WARING, JOHN	Consulting Electrician, The Perkins Electric Lamp Co., Manchester, Conn.	Dec. 16, 1890
WATERHOUSE, FRANK G.	Bolinas Bay, Cal.	Sept. 6, 1887
WATERS, EDWARD G.	Electrical Engineer. Thomson-Houston Electric Co, 620 Atlantic Ave., Boston, Mass.	Mar. 18, 1890
WATSON, ROBERT	The Elektron M'f'g. Co., 79 Washington St., Brooklyn, N. Y.	Oct. 21, 1890
WATTS, H. FRANKLIN.	Electrical Engineer, Meriden Horse R. R. Co., Box 1001., Meriden, Ct.	May 20, 1890
WELLES, FRANCIS R,	Manufacturer, Bell Telephone Manufacturing Co., Antwerp, Belgium	Sept. 6, 1887
WELLER, HARRY W.	Railroad Inspector, The Edison General Electric Co., Edison Building. Broad Street, and Jamaica, N. Y.	Oct. 21, 1890
WHITE, H. C.	Manager, Phœnix Iron Works Co., 15 Cortlandt St., New York.	April 15, 1884
WHITE, J. G.	J. G. White & Co., Electrical Engineers and Contractors, 50 Broadway New York City.	April 2, 1889
WHITE, WILL F.	Electrical Engineer, Sec'y and Treas. Western Engineering Co., 448 Bee Building. Omaha, Neb.	Feb. 7, 1890
WHITMORE, W. G.	Electrical Engineer, Edison General Electric Co., Edison Building, Box 3067, N. Y. C.	Mar. 18, 1890
WHITNEY, HENRY M.	President, West End Street Railway Co., 81 Milk St., Boston, Mass.	July 12, 1887

Name	Address	Date of Election.
WIGHTMAN, MERLE J.	Vice-President and Electrician, The Wightman Elec. Mfg Co., 4 Commonwealth Bldg., Scranton, Pa.	Mar. 5, 1889
WILEY, WM. H.	Scientific Expert. 53 East 10th St., New York.	Feb. 7, 1888
WILLIAMS, ARTHUR S.	Electrician, American Telephone and Telegraph Co., 18 Cortlandt St., New York City.	May 20, 1890
WILLIAMS, CHARLES, JR.	Electrician, 100 Sudbury St., Boston, Mass.	April 15, 1884
WILLIAMS, JAMES B. *M. D.*	44 Broadway, Room 60, New York.	Sept. 7, 1888
WINKLER, CHARLES F.	Electrician, Troy Electric Dynamo Co., 4 Park Ave., Troy, N. Y.	Sept. 3, 1889
WINSLOW, I. E.	458 Produce Exchange, New York.	Nov 12, 1889
WINTRINGHAM, J. P.	Theorist, 36 Pine St., New York.	May 7, 1889
WIRT, CHARLES.	Electrical Engineer of the Electrical Supply Co., 171 Randolph St., Chicago.	Sept. 8, 1888
WOLVERTON, B. C.	Electrician, N. Y. & Pa. Telephone & Telegraph Co., Elmira, N. Y.	Mar. 18, 1890
WOOD, E. J.	Consulting Engineer and Contractor, 243 Broadway, New York.	July 12, 1887
WOODRUFF, H. O.	Des Moines, Iowa.	Oct. 2, 1888
WOOLF, ALBERT E.	Electrician and Inventor, Woolf Electrical Co., 20 Nassau St. Room 50 and 864 Lexington Ave., New York City.	Sept. 16, 1890
WORTHINGTON, GEORGE	Manager, *Electrical Review*, 13 Park Row, New York	April 15, 1884
WRIGHT, JOHN D.	Electrician's Assistant, United Electric Traction Co., 107 Garrison Ave., Jersey City, N. J.	Oct. 21, 1890
YOUNG, ALDEN M.	Contractor for Organization and Complete Equipment of Electric Lighting Plants, 101 Bank St, Waterbury, Conn.	Sept. 6, 1887
YOUNG, C. GRIFFITH	Superintendent and Electrician, Mount Morris Electric Co., Vandam and Greenwich Sts., and 243 W. 45th St., New York City.	Jan. 3, 1889
ZALINSKI, EDMUND L.	Captain of Artillery, U. S. A., Care of War Dept., Washington, D. C.	May 17, 1887

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"The objects of the American Institute of Electrical Engineers are to promote the Arts and Sciences connected with the production and utilization of electricity, and the welfare of those employed in these industries; by means of meetings for social intercourse, the reading and discussion of professional papers, and the circulation, by means of publications among its members and associates, of the information thus obtained."

Receiving prompt and hearty support at the outset, it has by more frequent meetings and the gradual acquisition of the best electrical talent in the country, now reached that stage so essential to the success of an engineering society, where no electrical engineer who desires to keep abreast with the times can afford to remain outside of its ranks. All of the papers which have been read before the Institute during the past three years have been published in most of the electrical journals in America, and some of the more important have appeared abroad. Those published by the Institute, form a most complete history of the whole line of recent electrical development. The discussions of these papers are, however, to be found complete only in the Institute Transactions, which are published monthly. The possession of the publications of the Institute enables its members to keep fully posted on electrical progress throughout the world with the least expenditure of time.

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Transactions of the Institute Already Published.

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ELECTRIC STREET CARS. T. C. Martin, of New York,—THE PRACTICAL REQUIREMENTS OF SMALL MOTORS. S. S. Wheeler, of New York.—DISTRIBUTION OF ELECTRICITY BY SECONDARY GENERATORS. Discussion by F. L. Pope, Dr. Otto A. Moses, Captain O. E. Michaelis, Prof. Elihu Thomson and others.—STORAGE BATTERIES IN PRACTICE. B. P. Roberts, of Cleveland, O.—DIFFERING TEMPERATURE COEFFICIENTS OF THE DIFFERENT COILS OF A FINE RHEOSTAT. Prof. W. A. Anthony, now of Manchester, Conn.—ON THE BEST RATIO OF THE SECTION OF THE GRAMME ARMATURE TO THE SECTION OF THE FIELD MAGNETS. (Illustrated.) Dugald C. Jackson, now of Lincoln, Neb.—NOVEL PHENOMENA OF ALTERNATING CURRENTS. (Illustrated.) Prof. Elihu Thomson, of Lynn, Mass.—A FEW COMPARATIVE STATISTICS OF ELECTRIC RAILWAYS. T. C. Martin, of New York. (With tabular statement.)—CENTRAL STATION CONSTRUCTION. J. A. Powers, of Troy, New York.—ON THE CHANGE FROM NEGATIVE TO POSITIVE OF THE TEMPERATURE COEFFICIENTS OF SOME CARBON FILAMENTS. (Illustrated.) Prof. W. A. Anthony, of Manchester, Conn.—LEAD ENCASED CONDUCTORS. (Illustrated.) David Brooks, of Philadelphia.—THE ELECTRIC LIGHTING OF PASSENGER TRAINS. (Illustrated.) Geo. W. Blodgett, of Boston.

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ON ELECTRIC STREET CARS, WITH SPECIAL REFERENCE TO METHODS OF GEARING. Anthony Reckenzaun, of London. No. 1, October, 1887.—A COULOMB METER, OR INSTRUMENT FOR MEASURING THE CONSUMPTION OF ELECTRICITY. (Illustrated.) Prof. George Forbes, F.R.S., of London. No. 2, November, 1887.—RECENT IMPROVEMENTS IN APPARATUS FOR OCEAN CABLING. (Illustrated.) Charles Cuttriss. Supplementary Note on the Siphon Recorder, and Ocean Telephony, by Thos. D. Lockwood. No 3, December, 1887.—PHENOMENA OF RETARDATION IN THE INDUCTION COIL. (Illustrated.) William Stanley, Jr. No. 4, January, 1888.—REVISION OF THE PATENT LAW. Arthur Steuart, Esq. No. 5, February, 1888.—ELECTRIC ENERGY FROM CARBON WITHOUT HEAT. Willard E. Case, Auburn, N. Y. No. 6, March, 1888.—ALTERNATING CURRENT ELECTRIC MOTORS. Dr. Louis Duncan, Baltimore, Md. No. 7, April, 1888.—MAXIMUM EFFICIENCY OF INCANDESCENT LAMPS. (Illustrated.) John W. Howell. No. 8, May, 1888.—PROTECTION OF THE HUMAN BODY FROM DANGEROUS CURRENTS. Patrick B. Delany.—THE POSSIBILITIES AND LIMITATIONS OF CHEMICAL GENERATORS OF ELECTRICITY. Francis B. Crocker. No. 9, June, 1888.—ON COMPENSATED RESISTANCE STANDARDS. (Illustrated.) Edward L. Nichols. A NEW SYSTEM OF ALTERNATE CURRENT MOTORS AND TRANSFORMERS. (Illustrated.) Nikola Tesla. UNDERGROUND ELECTRICAL CONDUCTORS IN EUROPE AND AMERICA. Prof. G. W. Plympton. THE PATENT COURT AND UNIFORMITY IN PATENT OFFICE PRACTICE. George H. Stockbridge. A SWINGING ARM GALVANOMETER. (Illustrated.) George S. Moler. No. 10, July, 1888. THE SOLUTION OF THE MUNICIPAL RAPID TRANSIT PROBLEM. (Illustrated.) Frank J. Sprague. No. 11, August, 1888. SOME OBJECTIONS TO THE OVERHEAD CONDUCTOR FOR ELECTRIC RAILWAYS, M. B. Leonard. NOTE ON GEARING FOR ELECTRIC RAILWAY MOTORS, Almon Robinson. No. 12, September, 1888.

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THE GEYER-BRISTOL METER FOR DIRECT AND ALTERNATING CURRENTS. [Illustrated.] Prof. William E. Geyer. THE ABDANK MAGNETIC CALL AND THE ABDANK INTEGRAPH. [Illustrated.] E. Abdank-Abakanowicz. No. 1, January, 1889. SIX YEARS PRACTICAL EXPERIENCE WITH THE EDISON CHEMICAL METER. (Illustrated.) W. J. Jenks. No. 2, February, 1889. LIGHTNING ARRESTERS AND THE PHOTOGRAPHIC STUDY OF SELF-INDUCTION. (Illustrated.) E. G. Acheson. No. 3, March, 1889. A NEW SYSTEM OF MULTIPLEX TELEGRAPHY. (Illustrated.) Lieut. F. Jarvis Patten. LIGHTNING ARRESTERS AND THE PHOTOGRAPHIC STUDY OF SELF INDUCTION. Notes by Jo. Stanford Brown and Chas. T. Child. REPLY TO THE NOTES OF MESSRS. BROWN AND CHILD by E. G. Acheson. No. 4, April, 1889. THE EFFICIENCY OF METHODS OF ARTIFICIAL ILLUMINATION. Illu-trated. Edward L. Nichols. No. 5, May, 1889. SOME RESULTS WITH SECONDARY BATTERIES IN TRAIN LIGHTING. (Illustrated.) Alexander S. Brown. THE INHERENT DEFECTS OF LEAD STORAGE BATTERIES. (Illustrated.) DR. Louis Duncan. ELECTRIC MOTOR REGULATION. (Illustrated.) Francis B. Crocker. Nos. 6 and 7, June and July 1889, (Double Number). MAGNETISM IN ITS RELATION TO INDUCED ELECTROMOTIVE FORCE AND CURRENT. (Illustrated.) Prof. Elihu Thomson of Lynn, Mass. ON THE RELATION BETWEEN THE INITIAL AND THE AVERAGE EFFICIENCY OF INCANDESCENT LAMPS. (Illustrated.) W. H. Peirce of New York. THE EFFICIENCY OF THE ARC LAMP. (Illustrated.) H. Nakano, of Japan, with an introductory note by Prof. E. L. Nichols. THE SPIRAL COIL VOLTAMETER. (Illustrated.) Harris J. Ryan, of Ithaca, N. Y. THE PERSONAL ERROR IN PHOTOMETRY. (Illustrated). Prof. Edward L. Nichols, of Ithaca, N. Y. ON MODERN VIEWS WITH RESPECT TO ELECTRIC CURRENTS. (Illustrated.) Prof. Henry A. Rowland, of Baltimore, Md. CLASSIFIED LIST OF MEMBERS. Nos. 8 and 9, August and September, 1889, (Double Number.) No. 10, October, 1889. SOME RECENT ELECTRICAL WORK ON THE ELEVATED RAILROADS. (Illustrated.) Leo Daft, of Plainfield, N. J. ALTERNATING CURRENT MOTORS: THE EVOLUTION OF A NEW TYPE. (Illustrated.) Lieut F. Jarvis Patten, of New York. No. 11, November, 1889. ELECTRICAL NOTES OF A TRANS-ATLANTIC TRIP. Thomas D. Lockwood, of Boston, Mass. SOME METHODS OF REGULATING ACCUMULATORS IN ELECTRIC LIGHTING. (Illustrated.) George B. Prescott, Jr., of New York. No. 12, December, 1889. FORM AND EFFICIENCY OF INCANDESCENT FILAMENTS. Charles J. Reed of New York. TELEGRAPH LINE ADJUSTMENT:—NOTE ON A NEW GRAVITY CELL. F. B. Delany of New York.

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TRANSFORMERS. (Illustrated.) Harris J. Ryan. No. 1, January, 1890. A REVIEW OF THE MODERN THEORIES OF ELECTRICITY. (Illustrated.) Prof. W. A. Anthony. No. 2, February, 1890. THE PRACTICAL WORKING OF THE ELECTRICAL SURFACE OF NEW YORK CITY. (Illustrated.) William Maver, Jr. No. 3, March, 1890. SOME TESTS ON THE EFFICIENCY OF ALTERNATING CURRENT APPARATUS. (Illustrated.) Dr. Louis Duncan and W. F. C. Hasson. No. 4, April, 1890. PHENOMENA OF ALTERNATING CURRENT INDUCTION. (Illustrated.) Prof. Elihu Thomson. ELECTRICITY IN THE NAVY. Gilbert Wilkes, No. 5, May, 1890. ELECTRIC LIGHTING IN THE TROPICS. Wilfrid H. Fleming. LIFE AND EFFICIENCY OF ARC LIGHT CARBONS. (Illustrated.) Louis B. Marks. PRACTICAL ASPECTS OF THE ALTERNATING CURRENT THEORY. M. I. Pupin. MAGNETIC DATA OF THE SPRAGUE STREET CAR MOTOR. (Illustrated.) H. F. Parshall. THE INDUSTRIAL UTILIZATION OF THE COUNTER ELECTROMOTIVE FORCE OF SELF-INDUCTION. Thomas D. Lockwood. Nos. 6 and 7, June and July. (Double Number.) LIFE AND EFFICIENCY OF ARC LIGHT CARBONS Discussion. (Illustrated.) PRACTICAL ASPECTS OF THE ALTERNATING CURRENT THEORY. Discussion. NOTE ON A NEW PHOTOMETER. (Illustrated.) Dr. Edward L. Nichols of Ithaca, N. Y. THE LIMITATIONS OF STEAM AND ELECTRIC TRANSPORTATION. (Illustrated.) Oscar T. Crosby, now of New Orleans. AUTOMATIC ELECTRIC WELDING MACHINES. Hermann Lemp, Jr., of Lynn, Mass. Nos. 8 and 9, August and September, (Double Number.) EFFICIENCY OF TRANSFORMERS. (Illustrated.) Calvin Humphreys and W. H. Powell. NOTES UPON SOME EXPERIMENTS WITH ALTERNATING CURRENT APPARATUS. (Illustrated.) Prof. Harris J. Ryan. CATALOGUE OF MEMBERSHIP. Revised to November 1st. 1890. No. 10 October. PRELIMINARY REPORT OF THE STANDARD WIRING TABLE COMMITTEE. RESOLUTIONS ON ADOPTION OF AMERICAN NAMES FOR ELECTRICAL UNITS. INVESTIGATION OF THE STANLEY ALTERNATE CURRENT ARC DYNAMO. W. B. Tobey and G. H. Walbridge. A NEW METHOD OF ANALYZING ARMATURE REACTIONS, APPLIED TO THE STANLEY ARC LIGHT ALTERNATING CURRENT MACHINE. Thorburn Reid. No. 11 November. REVISED REPORT OF THE STANDARD WIRING TABLE COMMITTEE. THE THEORY OF COMPOUND WINDING FOR CONSTANT POTENTIAL. (Illustrated.) Dr. Louis Bell, of New York. A NEW METHOD OF ANALYZING ARMATURE REACTIONS OF ALTERNATORS. Charles Steinmetz, of Yonkers, N. Y. LIST OF NEW ASSOCIATE MEMBERS. Elected Sept. 16th, Oct. 21st. Nov. 18 and Dec. 16th. No. 12 December.

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American Institute of Electrical Engineers.

CATALOGUE OF MEMBERS.

May 1st, 1891.

HONORARY MEMBERS.

Name.	Address.	Date of Membership.
Farmer, Prof. Moses G.	Electrician and Inventor, Eliot, Me.	A April 15, 1884 H.M. Oct. 21, '90
Green, Dr. Norvin	(*Past President*). Pres't Western Union Telegraph Co. P. O. Box 3393, 195 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884 H.M. Dec. 3, 1889
Preece, Wm. H. *F. R. S.*	Electrician, General Post Office, London, Eng. Residence, Gothic Lodge, Wimbledon.	H.M. Oct. 21, 1884

MEMBERS.

Acheson, Edw. G.	President, The Monongahela Electric Light Co., Monongahela City, Pa.	A Jan. 3, 1888 M May 1, 1888
Ahearn, T.	Ahearn & Soper, Electrical Supplies, Ottawa, Ont.	A July 12, 1887 M Sept. 6, 1887
Anthony, Prof. W. A.	Consult'g Electrician. The Mather Electric Co., Manchester, Conn.	A Dec. 9, 1884 M Jan. 6, 1885
Batcheller, B. C.	Superintendent of the Pneumatic Dynamite Gun Co., 71 Broadway, New York.	A Sept. 6, 1887 M Nov. 1, 1887
Batchelor, Chas.	Electrical Engineer, 33 West Twenty-fifth St., New York.	A June 8, 1887 M July 12, 1887
Bates, J. H.	Moore Electrical Manufacturing Co., 106-8 Liberty St., New York City.	A Sept. 6, 1887 M Oct. 1, 1889
Bates, Maurice E.	Manager, Western Electric Construction Co., 503 Delaware St., Kansas City, Mo.	A Aug. 6, 1889 M Oct. 1, 1889
Bauer, A. H.	Electrical Engineer, Pullman Palace Car Co., Pullman Building, Chicago, Ill. Room 307.	A Feb. 7, 1890 M Apr. 21, 1891
Bayly, B.	Surveyor and District Engineer, Western District Colonial Gov't. Cape Town, Cape of Good Hope, Africa.	A Oct. 4, 1887 M Dec. 6, 1887
Bell, Prof. A. Graham	1336 Nineteenth St., Washington, D. C.	A April 15, 1884 M Oct. 21, 1884
Bell, Dr. Louis,	Editor *Electrical World*, 167 Times Building, P.O. Box 3332, N. Y.	A May 20, 1890 M June 17, 1890

Name.	Address.	Date of Membership.
BERNARD, EDGAR G.	Electrical Engineer, E. G. Bernard & Co., Hall Building, Troy, N. Y.	A Jan. 5, 1886 M July 12, 1887
BINNEY, HAROLD	Assistant in the Practice of Patent Law, with Gilbert M. Plympton, 245 Broadway, New York City.	A Sept. 16, 1890 M Dec. 16, 1890
BIRDSALL, E. T. *M. E.*	Electrical Engineer, 115 Broadway, New York.	A June 8, 1887 M Nov. 1, 1887
BLAKE, EDWARD	361 Temple Street, New Haven, Conn.	A May 24, 1887 M Sept. 3, 1889
BLAKE, FRANCIS	Auburndale, Mass.	A Sept. 3, 1889 M Oct. 1, 1889
BLODGETT, GEO. W.	Electrical Engineer B. & A. R. R. and Consulting Electrician, Boston, Mass.	A July 12, 1887 M Sept. 6, 1887
BOSCH, ADAM	Sup't, Fire Alarm Telegraph, Newark, N. J.	A April 15, 1884 M Jan. 6, 1885
BRADLEY, CHAS. S.	Electrical Engineer, Wayne Hotel, Fort Wayne, Ind.	A May 24, 1887 M Dec. 6, 1887
BROOKS, MORGAN	Secretary and Treasurer, The Electrical Engineering & Supply Co., 413 Jackson St., and 529 Holly Ave., St. Paul, Minn.	A May 20, 1890 M June 17, 1890
BROWN, JO. STANFORD	Electrical Engineer, 63 Livingston St., Brooklyn, N. Y.	A Sept. 6, 1887 M Nov. 1, 1887
BRUSH, CHAS. F.	Electrical Engineer, 956 Euclid Ave, Cleveland, O.	A April 15, 1884 M Oct. 21, 1884
BYLLESBY, HENRY M.	Thomson-Houston Electric Co , 115 Broadway, New York City.	A Sept. 7, 1888 M Oct. 2, 1888
CARROLL, LEIGH	President and General Manager, The Edison Electric Illuminating Co., Birmingham, Ala.	A Oct. 1, 1889 M Nov. 12, 1889
CHAMBERLAIN, J. C.	(*Manager.*) Supt. Julien Electric Traction Co., 135 East 18th St., New York.	A Dec. 6, 1887 M Jan. 3, 1888
CHREVER, CHAS. A.	13 Park Row, New York.	A April 15, 1884 M Oct. 21, 1884
CHURCH, WM. LEE	Member of Westinghouse, Church, Kerr & Co., Engineers, 620 Atlantic Ave., Boston, Mass.	A April 5, 1887 M May 17, 1887
CLARK, ERNEST P.	Electrical Engineer, 192 Broadway, New York.	A Jan. 8, 1887 M Nov. 1, 1887
CLARKE, CHAS. L.	Mechanical and Electrical Engineer, 55 Liberty St., New York.	A April 15, 1884 M Jan. 6, 1885
COLBY, EDWARD A.	Electrician of the Weston Electrical Instrument Co., Lock Box 313. Newark, N. J.	A April 2, 1889 M May 7, 1889
CONDICT, G. HERBERT	General Manager, The Electric Car Co. of America, 4720 Green St., Germantown, Pa.	A July 12, 1887 M Sept. 6, 1887
COTHREN, WM. H.	Edison General Electric Co., Rialto Building, Chicago, Ill.	A Aug. 6, 1889 M Oct. 1, 1889

Name.	Address.	Date of Membership.
COWLES, ALFRED H.	Technical Adviser to the Cowles Smelting and Aluminum Co., Lockport, N. Y.	A Mar. 5, 1889 M May 7, 1889
CROCKER, FRANCIS B.	(*Vice-President.*) Instructor in Electrical Engineering, School of Mines, Columbia College, and 54 W. 21st Street, New York.	A May 24, 1887 M April 2, 1889
CROSS, PROF. CHAS. R.	Thayer Professor of Physics, and Director of the Rogers Laboratory, Mass. Institute of Technology, Boston, Mass.	A April 15, 1884 M Oct. 21, 1884
CUTTRISS, CHAS.	(*Manager*). Electrician, The Commercial Cable Co., 1 Broad St., New York.	A Nov. 1, 1887 M Dec. 6, 1887
DAFT, LEO	Electrician, Plainfield, N. J.	A Dec. 9, 1884 M Jan. 6, 1885
DANVERS, ALAN	Managing Director and Chief Electrician, The Anglo-Portugese Telephone Co., L't'd. 60 Travessa Santa Justa, Lisbon, Port'l.	A Nov. 1, 1887 M Sept. 3, 1889
DANVERS, ERNESTO	Electrical Engineer, Casilla 74, Rosario, Argentine Republic.	A Jan. 3, 1888 M May 1, 1888
DAVIES, JOHN E.	Professor of Physics, University of Wisconsin, 523 Carroll St. Madison, Wis	A Jan. 7, 1890 M Mar. 18, 1890
DAVIS, CHARLES H.	Consulting Electrical Engineer, 120 Broadway, New York.	A Mar. 18, 1890 M June 17, 1890
DELAFIELD, A. FLOYD, *Ph.D.*	Electrical Engineer, Noroton, Conn.	A May 7, 1889 M Oct. 1, 1889
DICKENSON, SAMUEL S.	Sup't, Commercial Cable Co., Hazel-Hill, Guysborough Co., N.S.	A Mar. 6, 1888 M Oct. 1, 1889
DIEHL, PHILIP	Inventor, Singer Sewing Machine Co., Elizabeth, N. J.	A April 15, 1884 M Dec. 9, 1884
D'INFREVILLE, GEORGES	Electrical Engineer and Expert 110 Liberty St., New York.	A Nov. 1, 1887 M Dec. 6, 1887
DOIJER, H.	Electrical Engineer, The Electrical Standardizing Testing and Training Institution, Faraday House, Charing-Cross Road. London, W. C. Eng.	A Jan. 7, 1890 M Mar. 18, 1890
DONNER, WILLIAM H.	Designing Draughtsman, and Electrical Engineer, Thomson-Houston Electric Co., 113 Franklin St., Lynn, Mass.	A Nov. 18, 1890 M Dec. 16, 1890
DUDLEY, CHARLES B.	Chemist and Scientific Expert, Penn. R. R. Co., 1219 Twelfth Ave., Altoona, Pa.	A Oct. 1, 1889 M Nov. 12, 1889
DUNCAN, DR. LOUIS	(*Vice-President*). Johns Hopkins University, Baltimore, Md.	A July 12, 1887 M Sept. 6, 1887
DYER, R. N.	Patent Attorney, 36 Wall St., New York.	A July 12, 1887 M Sept. 6, 1887
EDISON, THOMAS A.	Mechanician and Inventor, Orange, N. J.	A April 15, 1884 M Oct. 21, 1884
FARNHAM, ISAIAH H.	Electrician for the N. E. Telephone & Telegraph Co., 50 Pearl St., Boston, Mass.	A June 8, 1887 M July 12, 1887
FESSENDEN, REGINALD A.	Assistant Electrician, U. S. Electric Light Co., Newark, N. J.	A Oct. 21, 1890 M Dec. 16, 1890

Name.	Address.	Date of Membership.
FIELD, C. J.	President and General Manager Field Engineering Co., 15 Cortlandt St., New York.	A June 8, 1887 M Nov. 1, 1887
FIELD, STEPHEN D.	Electrician and Inventor, Stockbridge Mass.	A April 15, 1884 M Oct. 21, 1884
FITCH, D. H.	President, The Fitch Battery and Electric Co., Oneida, N. Y.	A Sept. 3, 1889 M Oct. 1, 1889
FLEMING, WILFRID H.	261 Clifton Place, Brooklyn, N. Y.	A Dec. 6, 1887 M Jan. 3, 1888
FOSTER, HORATIO A.	(*Manager.*) Electrical Engineer, 45 E. Twenty-second St., New York.	A June 8, 1887 M Sept. 6, 1887
FREEMAN, DR. FRANK L.	Attorney-at-Law, Solicitor of Patents, Electrical Expert, 931 F St., Washington, D. C.	A May 7, 1889 M Sept. 3, 1889
GARRATT, ALLAN V.	President, Spokane and University Heights Street Railway Co., Spokane Falls, Wash.	A April 2, 1889 M May 7, 1889
GARVER, M. M.	48 Walnut St., Newark, N. J.	A July 10, 1888 M Sept. 3, 1889
GEYER, DR. WM. E.	(*Manager*). Stevens Institute of Technology, Hoboken, N. J.	A June 5, 1888 M Sept. 7, 1888
GRISCOM, WM. W.	Haverford College P. O., Montgomery Co., Pa. President, The Electro Dynamic Co., 224 Carter St., Philadelphia and Managing Electrician The Electrical Accumulator Co., New York.	A June 5, 1888 M Mar. 18, 1890
HALL, CLAYTON C.	Civil Engineer, 810 Park Ave., Baltimore, Md.	A April 15, 1884 M Oct. 21, 1884
HAMBLET, JAMES	Manager Time Service, W. U. Tel. Co., 195 Broadway, P. O. Box 3393, New York.	A Nov. 1, 1887 M Dec. 6, 1887
HAMILTON, GEO. A.	Electrician, Western Electric Co., 22 Thames cor. Greenwich St., New York.	A April 15, 1884 M Oct. 21, 1884
HAMMER, W. J.	Consulting and Supervising Electrical Engineer, 533 Temple Court, N. Y., and 23 Rowland St., Newark, N. J.	A June 8, 1887 M July 12, 1887
HANCOCK, WM. J.	Supt. of Telephones, Dept. of Public Works, Perth, Western Australia.	A Jan. 7, 1890 M Mar. 18, 1890
HASKINS, CHARLES H.	Electrician, care of New York Club, Fifth Ave and Thirty-fifth St., New York.	A April 15, 1884 M Oct. 21, 1884
HAYES, HAMMOND V.	Electrician, American Bell Telephone Co., 127 Purchase St., Boston, Mass.	A Nov. 12, 1889 M Mar. 18, 1890
HAYNES, F. T. J.	Divisional Telegraph Engineer, Great Western Railway, Taunton, Eng.	A Dec. 6, 1886 M Jan. 3, 1887
HAZARD, COL. ROWLAND R.	N. Y. District Railway Co., 120 Broadway, New York.	A April 15, 1884 M Oct. 21, 1884
HERING, CARL	Consulting Electrical Engineer, 3816 Spring Garden St., Philadelphia, Pa	A Jan. 3, 1888 M June 5, 1888
HERZOG, DR. F. BENEDICT	(*Manager*) President Herzog Teleseme Co., 30 Broad St., New York.	A May 24, 1887 M July 12, 1887

Name.	Address.	Date of Membership.
HIGGINS, EDWARD E.	Electrical Engineer, General Manager, The Short Electric Railway Co., Cleveland, O.	A June 8, 1887 M July 12, 1887
HOUSTON, PROF. EDWIN J.	1521 Mt. Vernon St., Philadelphia, Pa.	A April 15, 1884 M Oct. 21, 1884
HOWELL, JOHN W.	Electrician, Edison Lamp Co., Harrison N. J.	A July 12, 1887 M June 5, 1888
HOWELL, WILSON S.	Electrical Expert, 167 Warren St., Brooklyn, N. Y.	A Sept. 3, 1889 M Mar. 18, 1890
HUNTER, RUDOLPH M.	Mechanical and Elect'al Engineer, 926 Walnut St., Philadelphia, Pa.	A July 13, 1886 M May 17, 1887
HUTCHINSON, DR. CARY T.	Electrical Engineer, 56 West 25th St., New York City.	A Feb. 7, 1890 M Dec. 16, 1890
HYDE, JEROME W.	Springfield, Mass.	A June 8, 1887 M Nov. 1, 1887
JACKSON, DUGALD C.	District Engineer, Edison General Electric Co., Rialto Building, Chicago, Ill.	A May 3, 1887 M June 17, 1890
JACKSON, FRANCIS E.	With Edison Lamp Co., Harrison, N. J.	A Jan. 3, 1888 M June 17, 1890
JANNUS, FRANKLAND	Solicitor of Patents, 928-30 F. St Washington. D. C.	A Nov. 12, 1889 M Mar. 18, 1890
JENKS, W. J.	Technical Department, Edison, General Electric Co., 44 Wall Street, New York.	A June 8, 1887 M Nov. 1, 1887
JONES, FRANCIS W.	Assistant Gen'l-Manager and Electrician, Postal-Telegraph Cable Co., 5 Dey St., New York.	A April 15, 1884 M Oct. 21, 1884
KNOWLES, E. R.	Civil, Electrical, and Mechanical Engieeer, 181 Broadway, N. Y. and 4390 Waverly Ave., Brooklyn, N. Y.	A June 8, 1887 M July 12, 1887
KNUDSON, A. A.	Manager, Eastern Electric Co., St. John, N. B.	A Dec. 6, 1887 M Jan. 3, 1888
LANGE, PHILIP A.	Superintendent of Detail Department, Westinghouse Electric Co., Pittsburgh, Pa.	A Mar. 6, 1888 M June 5, 1888
LANGTON, JOHN	General Manager, Canadian Edison M'f'g Co., Sherbrooke, P. Q.	A Mar. 6, 1888 M June 5, 1888
LATTIG, J. W.	General Manager, National Switch and Target Co. South Easton, Pa.	A June 8, 1887 M July 12, 1887
LAWSON, A. J.	Electrical Engineer and Contractor, Montreal, P. Q., Box 1009.	A Mar. 18, 1890 M June 17, 1890
LEONARD, H. WARD	(*Manager*). General Manager, Edison General Electric Co., P. O. Box 3067, New York.	A July 12, 1887 M Sept. 6, 1887
LEONARD, M. B.	Electrical Engineer, and Supt. of Telegraph, Chesapeake & Ohio R'y. Co, Richmond, Va.	A Nov. 6, 1886 M May 1, 1888
LIEB, JOHN W., JR.	Chief Engineer, Società Generale Italiana di Elettricita (Sistema Edison). Via S. Radigonda N. 4, Milan, Italy.	A Sept. 6, 1887 M Nov. 1, 1887
LOCKWOOD, THOMAS D.	(*Manager*). Electrical Engineer, and Advisory Electrician. P. O., Drawer 2, Boston, Mass.	A April 15, 1884 M Oct. 21, 1884

Name.	Address.	Date of Membership.
LYNE, LEWIS F.	Mechanical and Elect'al Engineer, 307 Grove St., Jersey City, N. J.	A Jan. 3, 1888 M June 5, 1888
MAILLOUX, C. O.	Consulting Electrical Engineer, 32 Liberty St., New York.	A April 15, 1884 M Oct. 21, 1884
MARKS, WILLIAM DENNIS,	*Ph. B., C. E.* Edison Electric Light Co., Philadelphia, Pa.	A Feb. 7, 1888 M May 1, 1888
MARSHALL, J. T.	Inspector of Lamp Manufacture, Edison Lamp Co., Harrison, N. J.	A Oct. 1, 1889 M Nov. 12, 1889
MAVER, WILLIAM, JR.	(*Manager.*) Electrical Expert, 31 Nassau St., New York.	A July 12, 1887 M Apr. 21, 1891
MAYNARD, GEO. C.	Electrical Engineer, 1409 New York Ave., Washington, D. C.	A April 15, 1884 M Dec. 9, 1888
MILLIS, JOHN	Lieutenant of Engineers, U. S. Army, P.O. Drawer 432. New Orleans, La.	A July 7, 1884 M Mar. 3, 1885
MILLS, FRANK P.	Superintendent Cleveland Iron Mining Co., Ishpeming, Mich.	A Jan. 6, 1885 M Mar. 3, 1885
NICHOLS, EDWARD L.	(*Vice-President*). Professor of Physics, at Cornell University. Ithaca, N. Y.	A Oct. 4, 1887 M Dec. 6, 1887
PAINE, SIDNEY B.	Electrical Constructor, member of firm "Paine & Francis," 38 Pearl St., Boston, Mass.	A June 8, 1887 M Nov. 1, 1887
PARKS, C. WELLMAN	Electrician, 1825 Fifth Ave., Troy, N. Y	A July 12, 1887 M May 1, 1888
PARSHALL, H. F.	Electrician, The Wenstrom Consolidated Dynamo and Motor Co., 7 N. Calvert Street Baltimore, Md.	A Sept. 7, 1888 M Mar. 18, 1890
PATTEN, F. JARVIS,	Electrical Engineer, 47 Barclay St., Residence, 10 West Thirtieth St., New York.	A Sept. 6, 1887 M Nov. 1, 1888
PERRINE, FREDERIC A. C.	Superintendent Insulated Wire Dep't, John A. Roebling's Sons Co., 137 E. State St., Trenton, N. J.	A Sept. 16, 1890 M Dec. 16, 1890
PFANNKUCHE, GUSTAV	Engineer and Inventor, 655 Wilson Ave., Cleveland, O.	A Feb. 7, 1888 M May 1, 1888
PICKERNELL, F. A.	Sup't. of Equipment, Amer. Tel. & Tel. Co., 18 Cortlandt St. N. Y.	A Feb. 7, 1890 M Mar. 18, 1890
POPE, FRANKLIN L.	(*Past President*). Consulting Electrical Engineer and Expert, 15 Wall St., N. Y. Residence, Elizabeth, N. J.	A April 15, 1884 M Oct. 21, 1884
PORTER, J. F.	50 Broadway, New York City.	A Sept. 6, 1887 M Nov. 1, 1887
PRATT, J. HOWARD, JR.	Professor of Physics, Milwaukee Acad., Milwaukee, Wis.	A June 5, 1888 M Sept. 7, 1888
PRATT, ROBERT J.	Electrician. Manager, Electric M'f'g Co., Troy, N. Y.	A July 12, 1887 M Sept. 6, 1887
PRESCOTT, GEO. B., JR.	(*Manager*). Electrical Engineer, General Agent, Day's Kerite Wire and Cables. 16 Dey Street. New York.	A July 12, 1887 M Nov. 1, 1887

Name.	Address.	Date of Membership.
RAYMOND, CHAS. W. *	Civil and Electrical Engineer, Merrimac Consolidated Mining Co., Platoro, Conejos Co., Col.	A June 8, 1887 M May 17, 1887
RECKENZAUN, ANTHONY	Electrical Engineer, 7 Albert Terrace, Hemberton Road, Stockwell, London, S. W. England.	A Nov. 1, 1887 M Dec. 6, 1887
RECKENZAUN, FREDERICK,	Electrician, Box 225, West Hoboken, N. J.	A Mar. 6, 1888 M June 5, 1888
RICE, E. WILBUR, JR.	General Superintendent and Consulting Electrician, Thomson-Houston Elec. Co., Lynn. Mass	A Dec. 6, 1887 M Jan. 3, 1888
RIES, ELIAS E.	Electrician and Electrical Engineer, 430 South Broadway, Baltimore, Md.	A July 12, 1887 M Sept. 6, 1887
ROBERTS, E. P.	Electrician and Sup't, Swan Lamp Co., Belden St., Cleveland, O.	A Jan. 6, 1885 M Feb. 3, 1885
ROHRER, ALBERT L.	Electrical Engineer, with Thomson-Houston Electric Co., Lynn, Mass.	A Nov. 1, 1887 M May 1, 1888
SALOMONS, *Sir* DAVID LIONEL, *Bart. M. A.*,	Engineer and Barrister, Broomhill, Tunbridge Wells, Kent, and 49 Grosvenor St., London, W., England.	A Feb. 7, 1888 M May 1, 1888
SCHLESINGER, WM. M. **	Electrical Engineer, Edison Gen'l Electric Co., Box 3067, N. Y.	A Nov. 1, 1887 M Dec. 6, 1887
SCHULZE-BERGE, FRANZ	Edison Laboratory, Orange, N. J.	A Nov. 12, 1889 M Mar. 18, 1890
SHALLENBERGER, O. B.	Electrician, Westinghouse Electric Co., Pittsburgh, Pa	A Sept. 7, 1888 M Dec. 4, 1888
SHEPARD, WM. E.	Electrician, Salt Lake Rapid Transit Co., Salt Lake City, Utah.	A Feb. 7, 1890 M Mar. 18, 1890
SLATER, HENRY B.	Manager and Sup't, The Canon City Electric Light and Power Co., Canon City Col.	A April 15, 1884 M Dec. 9, 1884
SMITH, HERBERT G. *	General Electrician, Quezaltenango. Guatemala.	A Mar. 6, 1888 M June 5, 1888
STANDFORD, WILLIAM	Ass't Sup't Telegraphs, Colonial Gov't, Cape Town, Cape of Good Hope, Africa.	A Oct. 4, 1887 M Dec. 6, 1887
STEBBINS, THEODORE	Electric Railway Inspector, Thomson-Houston Elec. Co. 620 Atlantic Ave., Boston, Mass	A July 9, 1889 M June 17, 1890
STEINMETZ, CHARLES	Electrician, Osterheld & Eickemeyer, Yonkers, N. Y.	A Mar. 18, 1890 M April 21, 1891
STIERINGER, LUTHER	Electrical Expert, 1873 Lexington Ave., New York.	A June 8, 1887 M Nov, 1, 1887
TERRY, CHARLES A.	Lawyer, Westinghouse Electric Co, Pittsburgh, Pa	A April 5, 1887 M May 17, 1887
THOMSON, PROF. ELIHU	(*Past President*). Electrician, Thomson Houston Electric Co., and Thomson Electric Welding Co., Lynn, Mass.	A April 15, 1884 M April 21, 1891

Name.	Address.	Date of Election
THOMPSON, EDWARD P.	Consulting Electrician and Patent Attorney in Electrical Cases, 5 Beekman St., New York.	A April 15, 1884 M Dec. 3, 1889
THURNAUER, ERNST	Chief Engineer, Thomson-Houston International Elec. Co, Michaelisbrücke, 1, Hamburg, Germany	A Oct. 14, 1887 M Dec. 6, 1887
TROWBRIDGE, PROF. W. P.	School of Mines, Columbia College, New York.	A April 15, 1884 M Oct. 21, 1884
TURNER, WILLIAM S.	Electrical Engineer, Woodbridge & Turner, 47 Times Building, New York.	A Dec. 7, 1886 M Oct. 2, 1888
VAIL, J. H.	Ass't Engineer in Chief, Edison General Electric Co., Edison Building, P. O. Box 3067, N. Y.	A June 8 1887 M Nov. 1, 1887
VAN DEPOELE, CHARLES J.	Electrician, Electrical Railway Department, Thomson-Houston Electric Co., Lynn, Mass.	A June 5, 1888 M Sept. 7, 1888
VANSIZE, WILLIAM B.	Solicitor of Patents, 44 Broad St., New York.	A April 15, 1884 M Oct. 21, 1884
WADDELL, MONTGOMERY	Engineer, 18 Columbia Heights, Brooklyn, N. Y.	A Feb. 7, 1888 M May 1, 1888
WALKER, SYDNEY F.	Electrical Engineer, 195 Severn Road, Cardiff, England.	A June 2 1885 M May 17, 1887
WALDO, DR. LEONARD *	Electrical Engineer, The Aluminum Brass & Bronze Co., Bridgeport, Conn.	A June 5, 1888 M Dec. 4, 1888
WEAVER, W. D.	Hall Building, Troy, N. Y.	A May 17, 1887 M May 17, 1887
WEBB, HERBERT LAWS	Assistant Electrician, The Metropolitan Telephone and Telegraph Co., 18 Cortlandt, and 159 W. 94th St., N. Y. City.	A Oct. 21, 1890 M Dec. 16, 1890
WEEKS, EDWIN R.	General Manager, Kansas City Electric Light Co., National Bank of Kansas City Building. Kansas City, Mo.	A Sept. 6. 1887 M Nov. 1, 1887
WESTON, EDWARD	(*Past President* and *Vice-President*). Electrician, 645 High St., Newark, N. J.	A April 15, 1884 M Oct. 21, 1884
WETZLER, JOSEPH	(*Vice-President.*) Editor *Electrical Engineer*, 150 Broadway, N. Y.	A April 15, 1884 M Dec. 9, 1884
WHARTON, CHAS. J.	82 Bond St., London England.	A Jan. 3, 1888 M May 1, 1888
WHEELER, SCHUYLER S., *Sc.D.*	(*Vice-President*). President Crocker-Wheeler Electric Motor Co., 430-432 West Fourteenth St., Electrical Expert, Board of Electrical Control, 1266 Broadway, New York.	A June 2, 1885 M Sept. 1, 1885
WILKES, GILBERT	Edison General Electric Co., Edison Building, Box 3067, N. Y. City.	A Jan. 7, 1890 M Mar. 18, 1890
WILSON, FREMONT *	Electrician, 293 Lenox (6) Ave., New York.	A Mar. 6, 1888 M June 5, 1888

Name.	Address.	Date of Election.
WINCHESTER, A. E.	Designer of Steam Electrical Plants, Wilton, Conn.	A June 8, 1887 M Nov. 1, 1887
WOLCOTT, TOWNSEND	Consulting Electrician, 849 Greene Ave., Brooklyn, N. Y.	A Mar. 6, 1888 M Dec. 16, 1890
WOODBRIDGE, J. L.	Electrical Engineer, Woodbridge & Turner, 47 Times Building, New York,	A June 8, 1887 M Nov. 1, 1887
YOUNG, C. GRIFFITH	Superintendent and Electrician, Mount Morris Electric Co., Vandam and Greenwich Sts., New York City.	A Jan 3, 1889 M April 21, 1891
ZETSCHE, DR. CARL EDUARD,	Telegraph Engineer, Carlstrasse 8, II Dresden, N. Saxony.	A Nov. 1, 1887 M Jan. 3, 1888

Members, - - - 156.

ASSOCIATE MEMBERS.

Name.	Address.	Date of Election.
ABERNETHY, J. P.	Superintendent of Telegraph, 53 City Hall, Cleveland, O.	July 7, 1884
ABBOTT, ARTHUR V.	Mechanical Engineer, Ogden City Street Railway Co., Ogden, Utah.	Oct. 21, 1890
ALEXANDER, HARRY	Electrical Contractor, 340 West 145th St., New York City.	April 21, 1891
ALEXANDER, P. H,	President, Alexander, Barney and Chapin, 20 Cortlandt St., New York City.	Dec. 16, 1890
ANDERSON, ALEXANDER *	Superintendent and Manager of the Thomson-Houston Electric Co., Norfolk, Va.	Sept. 6, 1887
ANDREWS, WM. S.	Supt. Construction Dept, Edison General Electric Co., Edison Building, Box 3067, New York.	Mar. 5, 1889
ANTHONY, WATSON G.	Assistant Electrician, The Okonite Co., 324 Webster St., Newark, N. J.	Feb. 24, 1891
ATWOOD, GEORGE F.	Edison Laboratory, Orange, N. J.	Sept. 16, 1890
BACKSTROM, CHAS. A.	Manufacturer of Electric Incandescent Lamps, 154 & 156 West Twenty-seventh St., New York.	Nov. 13, 1888
BAILLARD, E. V.	363 Manhattan Ave., New York.	Dec. 3, 1889
BARTON, ENOS M.	President Western Electric Co., 227 South Clinton St., Chicago, Ill.	July 12, 1887
BARRETT, JOHN A.	Electrician, 189 Montague St., Brooklyn, N. Y.	June 8, 1887
BATES, D. H.	Vice-President and Gen'l Manager, The Electrical Accumulator Co., 44 Broadway, New York.	April 15, 1884
BATES, F. C.	Electrical Engineer, with Thomson-Houston Electric Co., Lynn, Mass.	Jan. 20, 1891

Name.	Address.	Date of Election.
BAUER, W. F.	Constructionist, The Electrical Accumulator Co., 62 Steuben St., East Orange, N. J.	April 15, 1890
BAYLES, ROBERT N.	Electrician, The "C & C" Electric Motor Co., 404 Greenwich St., New York.	Oct. 1, 1889
BEATTIE, JOHN, JR.	Manager and Superintendent, The Beattie Battery, Zinc and Electric Co., Fall River, Mass	Sept. 6, 1887
BEDELL, FREDERICK	Graduate Student, Cornell University, 118 Elm St., Montclair, N. J.	April 21, 1891
BELDING, WARREN S.	Electrician and Sup't. The Belding Motor and Mfg. Co., 6423 Stewart Boulevard, Englewood, Ill	April 15, 1890
BENBOW, WILLIAM C.	419 Beale Street, Memphis, Tenn.	Nov. 12, 1889
BENNETT, J. C.	Electrician, United Edison Mfg. Co. 44 Broad St., New York.	Mar. 18, 1890
BERHGOLTZ, HERMAN	General Manager, The Wightman Elec. Mfg. Co., 4 Commonwealth Bldg., Scranton, Pa.	April 2, 1889
BERLINER, EMILE	Inventor, Columbia Road, between Fourteenth and Fifteenth Sts., Washington, D. C.	April 15, 1884
BLACK, CHAS. N.	1113 Wilson Avenue, Cleveland, O.	Feb. 7, 1890
BLAKE, HENRY W.	The Street Railway Publishing Co., World Building, New York City.	Nov. 13, 1888
BLISS, DONALD M.	Electrician, The Canada Electric Co., Amherst, N. S.	Feb. 7, 1890
BLISS, WM. J. A.	Assistant in Practical Electricity, Johns Hopkins University, Baltimore, Md.	Jan. 20, 1891
BLOOD, W. HENRY, JR.	N. W. T. H. E. Co., Pray Building Minneapolis Minn.	April 2, 1889
BOGART, A. LIVINGSTON	Electrical and Patent Expert, 22 Union Square, New York,	July 10, 1888
BOGUE, CHARLES J.	165 West Eighteenth St., New York,	Dec. 3, 1889
BOTTOME, TURNER D.	Electrician and General Manager, White House Mills, Hoosick, N.Y.	April 21, 1891
BOTTOMLEY, HARRY	Electrical Engineer, 6 Farrar St., Lynn, Mass.	April 2. 1889
BOURNE, FRANK	Electrical Engineer, The Field Engineering Co., 15 Cortlandt St., New York City..	April 21, 1891
BOYNTON, EDWARD C.	Care of Elektron M'f'g Co., 79-81 Washington St., Brooklyn, N. Y.	Aug. 6, 1889
BRACKETT, PROF. CYRUS F.	Princeton, N. J.	April 15, 1889
BRADDELL, ALFRED E.	Electrical Inspector, Underwriter's Association, Middle Dep't, 308 Walnut St., Philadelphia, Pa.	Sept. 1, 1890

Name.	Address.	Date of Election.
BRADLEY, FRED. W.	106 West 29th St., New York City.	May 20, 1890
BRADY, PAUL T.	State Agent, Thomson-Houston Electric Co., Syracuse, N. Y.	July 12, 1887
BRINER, C. J.	Vice-President, Central Electric Construction Co., 515 Walnut St., St. Louis, Mo.	April 2, 1889
BROPHY, WILLIAM	Chief Inspector, Electric Mutual Insurance Co., 85 Water St., Room 50, Boston.	Mar. 5, 1889
BROWN, ALEX. S.	Electrical Engineer, Supt. U. S. Aluminium Metal Co., Boonton, N. J.	Jan. 7, 1890
BROWN, ALFRED S.	Electrical Engineer, Western Union Telegraph Co., 195 Broadway, New York City.	Mar. 18, 1890
BROWN, CHARLES A.	Manager Western Electric Co., 227 South Clinton St., Chicago, Ill.	July 12, 1887
BROWNING, HOWARD L.	Promoter and Contractor, 41 Dey St., New York.	Dec. 6, 1887
BUCKINGHAM, CHAS. L.	Patent Attorney, Western Union Telegraph Co., 195 Broadway, P. O. Box 3393, New York.	April 15, 1884
BULKLEY, J. NORMAN	Thomson-Houston Electric Co., Lynn, Mass.	Oct. 21, 1890
BUNCE, THEODORE D., JR.	Battery Expert, The Julien Electric Traction Co., 239 East 27th St., New York City.	May 20, 1890
BURNS, ELMER Z.	Consulting Electrical Engineer, Room 55, 4th Floor. 120 Broadway, N. Y.	Feb. 7, 1890
BURLEIGH, CHAS. B.	620 Atlantic Ave., Boston, Mass.	April 21, 1891
BURTON, GEO. D.	President, Electrical Forging Co., 194 Washington St., Boston, Mass.	April 21, 1891
BUYS, BERT.	Electrician, Rutherford B. S. & C. Elec. Co., Rutherford, N. J.	Feb. 7, 1890
CAHOON, JAS. B.	Electrical Engineer, Thomson-Houston Electric Co., 257 Washington St., Lynn, Mass.	June 17, 1890
CALDWELL, EDWARD	Assistant Editor, *Electrical World*, 167 Times Building, New York City.	Jan. 20, 1891
CARTY, J. J.	Electrician, Metropolitan Telephone and Telegraph Co., 18 Cortlandt St., New York.	April 15, 1890
CASE, WILLARD E.	6 Fort St., Auburn, N. Y.	Feb. 7, 1888
CASPER, LOUIS	Wheatstone Repeater Chief, Western Union Telegraph Co., Cheyenne, Wyoming.	April 21, 1891
CHAMBERLAIN, F. H.	Electrician. Metropolitan R. R. Co., 2411 P St., N. W. Washington, D. C.	June 17, 1890
CHANDLER, CHARLES F.	Professor of Chemistry, Columbia College, and Prof. of Chemistry and Physics, College of Physicians and Surgeons, New York City.	Jan. 20, 1891

Name.	Address.	Date of Election.
CHENEY, FREDERICK A.	Sec'y, Treas'r and General Manager, The Elmira Illuminating Co., Elmira, N. Y.	Oct. 1, 1889
CHERMONT, ANTONIO LEITE,	Manager Telephone Co. of Para, Para, U. S. of Brazil, Care Herbst Bros, Box 1377, New York.	Mar. 18, 1890
CHILD, FRANK W.	Contractor and Builder of Electric Railways, 115 Broadway, New York.	July 10, 1888
CHILDS, W. H.	Bookkeeper for The Estey Organ Co., Brattleboro, Vt.	Sept. 6, 1887
CHINNOCK, C. E.	Edison General Electric Co., Edison Building, P. O. Box 3067, New York.	April 15, 1884
CHUBBUCK, H. EUGENE	The New Omaha Thomson-Houston Electric Co., Omaha, Neb.	Dec. 4, 1888
CHURCHILL, ARTHUR.	Electrical Expert, 241 West 52d St., New York City.	April 15, 1890
CLEMENT, LEWIS M.	1013 Central Ave., Oakland, Cal.	April 21, 1891
CLEVELAND, WM. B.	Electrical Engineer, 309 Perry-Payne Building, Cleveland, O.	April 15, 1884
COBB, JOHN S.	Electrician. Care of Bergmann & Co. 537 W. 34th St., New York.	June 17, 1890
COFFIN, CHAS. A.	Vice-President and Treasurer, Thomson-Houston Electric Co., 620 Atlantic Ave., Boston, Mass.	Dec. 6, 1887
COGSWELL, A. R.	Electrician and Superintendent, Halifax Illuminating and Motor Co. Ltd., 34 Bishop St, Halifax, N. S.	April 21, 1891
COLGATE, GEO. L.	Electrical Engineer, Bedford Electric Co., Bedford City, Va.	June 17, 1890
COLLEY, BENJAMIN W.	First Ass't. Superintendent, The Commercial Cable Co, Hazel Hill, N. S.	Oct. 21, 1890
COLLINS, W. FORMAN	Western Manager, *The Electrical Engineer*, 225 Dearborn St., Chicago, Ill.	Dec. 6, 1887
COMPTON, ALFRED G.	Professor of Physics, College of the City of New York, 17 Lexington Ave., New York.	Nov. 1, 1887
CORNELL, CHAS. L.	Electrical Engineer, Cornell Engineering Co., 45 Broadway, N. Y.	Feb. 7, 1890
CRANE, W. F. D.	Electrician and Mechanical Engineer, The Electric Car Co. of America, 308 S. 10th Street, Philadelphia, Pa.	Feb. 7, 1888
CROSBY, OSCAR T.	General Manager Railway Dep't'ment, Thomson-Houston Electric Co., 620 Atlantic Ave., Boston, Mass.	Mar. 18, 1890
CUNTZ, JOHANNES H.	Assistant to Pres't Henry Morton, Stevens Institute of Technology, 137 Hudson St., Hoboken, N. J.	Mar. 5, 1889
CURTIS, CHAS. G.	114 East Thirtieth St., New York.	April 15, 1884

Name.	Address.	Date of Election.
CURTISS, GEORGE F.	Electrician, Thomson-Houston Electric Co., 234 Montgomery St., San Francisco, Cal.	April 2, 1886
CUSHMAN, HOLBROOK	Electrical Engineer, 337 West Twenty-second St., New York.	June 5, 1888
CUTTER, GEORGE	Dealer in Electrical Supplies, 192 Fifth Avenue, Chicago, Ills.	June 17, 1890
DANA R. K.	Agent Washburn and Moen M'f'g Co., 16 Cliff St., New York.	April 15, 1884
DANFORTH, A. H. **	Great Falls, Montana.	July 12, 1887
DANIELL, FRANCIS G.	Care Short Electric Railway Co., Cleveland, O.	Nov. 12, 1889
DAVENPORT, GEORGE W.	General Manager, Thomson-Houston International Electric Co., 620 Atlantic Ave., Boston, Mass.	June 4, 1889
DAVIDSON, EDW. C.	Patent Lawyer, Room 179, Times Bldg., New York.	Feb. 7, 1890
DAVIS, CHAS. M.	Superintendent, Light, Heat & Power Co., Pueblo, Col.	July 12, 1887
DAVIS, DELAMORE L.	Superintendent, Salem Electric Light & Power Co., Salem, O.	April 2, 1889
DAVIS, JOSEPH P.	Consulting Engineer, Care of Phœnix Construction Co., 115 W. 38th St., New York City.	April 15, 1884
DAVIS, MINOR M.	Ass't Electrician, Postal Telegraph Cable Co , 5 Dey St., New York.	April 6, 1886
DELANY, PATRICK BERNARD, (*Manager*).	Inventor, South Orange, N. J.	April 15, 1884
DENTON, JAMES E.	Professor of Experimental Mechanics, Stevens Institute of Technology, Hoboken, N. J..	July 12, 1887
DICKERMAN, GEORGE W.	Ass't. to General Manager, Eureka Electric Co., 173 Fifth Ave., New York City.	Nov. 18, 1890
DICKERSON, E. N.	Attorney-at-Law, 15 Wall St., N. Y.	April 15, 1884
DION, ALFRED A.	Electrician, Intercolonial Railway, Moncton, N. B.	Jan. 7, 1890
DOANE, S. EVERETT	Thomson-Houston Electric Co., Swampscott, Mass.	Aug. 6, 1889
DOBBIE, ROBERT S.	Electrician, 132 Jackson Ave., Jersey City, N. J.	Feb. 5 1889
DOREMUS, CHARLES A.	*M. D. Ph. D.* Chemist and Physicist, Bellevue Hospital Medical College, College of the City of New York and American Veterinary College, 92 Lexington Ave., New York.	July 7, 1884
DRESSLER, CHARLES E.	Maker of Scientific and Electrical Apparatus, College of the City of New York, 17 Lexington Ave., New York City	Dec. 16, 1890
DUNDERDALE, CLEAVELAND F.	Agent Westinghouse Electric Co., 146 Adams St., Chicago, Ill.	June 17, 1890

Name.	Address.	Date of Election.
DUNN, GANO S.	Student in Electrical Engineering, Columbia College, 66 W. 93d St., New York City.	April 21, 1891
DURANT, GEO. F.	Vice-Pres't of Bell Telephone Co. of Mo., 322 Pine St., St. Louis, Mo.	April 15, 1884
EKSTROM, AXEL	Electrician, Thomson-Houston Electric Co., Lynn, Mass.	June 17, 1890
ELEY, HARRIS H.	Electrical Workshop Sup't. W. C. & S. W. Telephone Co., 88 Colston St., Bristol, Eng.	Jan. 7, 1890
ELMER, WILLIAM, JR.	Under-graduate in Electrical Engineering, Princeton University, Princeton, N. J.	Mar. 18, 1890
EMMET, HERMAN L. R.	Publisher and Printer, 36 Cortlandt St., New York.	April 15, 1884
ENTZ, JUSTUS B.	Electrical Engineer, 18 Columbia Heights, Brooklyn, N. Y.	Jan. 7, 1890
EUSTIS, HERBERT H.	President and Electrician, Eastern Electric Cable Co., 61 Hampshire St., Boston, Mass.	April 15, 1890
FIELDING, FRANK E.	Chemist and Assayer, Virginia City, Nev.	Sept. 6, 1887
FISCHER, GUSTAVE J.	Engineer for Tramway Construction, Public Works Department, Sydney, N. S. W.	Jan. 20. 1891
FISKE, HENRY G.	Electrician, Croton Magnetic Iron Mines. 45 East Twenty-second Street, New York.	Nov. 12, 1889
FISKE, J. P. B.	Electrical Engineer, Thomson-Houston Electric Co., Lynn, Mass.	June 17, 1890
FITCH, GRAHAM D.	First Lieut. Corps of Engineers, U. S. A. Portland, Or.	Oct. 21, 1890
FLACK, J. DAY	Ass't Electrician in charge of Tests, Edison Lamp Co., Harrison, N. J.	Dec. 6, 1887
FLEMING, WALTER M. *M. D.* *	Vice-President of the Averell Insulating Conduit Co., 45 Broadway, Room 1, New York.	Jan. 3, 1888
FLOOD, J. F.	Electrician, Electric Light & Power Co., Steubenville, O.	Mar. 18, 1890
FOOTE, ALLEN R.	Special Agent, Electrical Industries, U. S. Census, Washington, D. C. P. O. Box 432.	April 21, 1891
FOOTE, THOS. H.	104 Columbia Heights, Brooklyn, N. Y.	April 21, 1891
FORBES, FRANCIS	Lawyer, 137 Broadway. New York City.	Sept. 16, 1890
FORD, ELLSWORTH	Superintendent Edison Electric Light Co., Ottumwa, Ia.	July 12, 1887
FOX, JOHN M.	Electrician, Room 201, 18 Broadway, New York City.	Mar. 18, 1890

Name.	Address.	Date of Election.
FRANCISCO, M. J.	President and General Manager, Rutland Electric Light Co., Rutland, Vt.	June 17, 1890
FREEDMAN, WILLIAM H.	Honorary Fellow in Electrical Engineering, Columbia College, 120 West 125th Street, New York.	Mar. 18, 1890
FRENCH, E. L.	Draughtsman, Mather Electric Co.. Manchester, Conn.	Dec. 16, 1890
FULLER, LEVI K.	Vice-President, Estey Organ Co., Brattleboro, Vt.	Mar. 5, 1889
GAINES, J. D.	Second Ass't. Superintendent, The Commercial Cable Co., Hazel Hill, N. S.	Oct. 21, 1890
GILES, WALTER A	Electrical Engineer, Mill and Mine Elec. Equipment Co., 95 Fifth Ave., Pittsburgh, Pa.	Nov. 1, 1887
GILLILAND, E. T.	Vice-Pres't Empire City Elec. Co., 15 Dey St. Residence, 179 West End Ave., New York.	April 15, 1884
GOLDMARK, CHAS. J.	473 Park Ave., New York.	June 5, 1888
GORTON, CHARLES	Civil Engineer, Belmont, N. Y.	Nov. 12, 1889
GORDON, REGINALD	Assistant in Physics. Columbia College, New York City, Residence, 76 Park Ave.	Feb. 24, 1891
GRAY, W. N.	Electrical Engineer, 12 Chamber of Commerce. Cincinnati, O.	Oct. 1, 1889
GREENBERG, ADOLPH G.	Salesman, Fort Wayne Electric Co., 115 Broadway, New York City, 90 Pierrepont St., Brooklyn, N. Y.	Mar. 17, 1891
GROWER, GEORGE G.	Electrician and Chemist, Ansonia Brass and Copper Co., Ansonia, Conn.	Mar. 18, 1890
GRIFFIN, CAPT. EUGENE	Thomson-Houston Elec. Co., 620 Atlantic Ave., Boston, Mass.	Feb. 7, 1890
GUTMANN, LUDWIG	Electrical Engineer, P. O. Box 560, Pittsburgh, Pa.,	Sept. 14, 1888
HALL, EDWIN H.	Assistant Professor of Physics, Harvard College, 5 Avon St., Cambridge, Mass.	Sept. 3, 1889
HALL, WILLIAM P.	President, The Hall Signal Co., 50 Broadway. New York City.	Sept. 16. 1890
HANDLEY, ARTHUR	Electrical Engineer, Electrical Engineering Co. of Ireland, Limited, 61 Dawson St., Dublin, Ireland.	Dec. 16, 1890
HARDING, H. McL.	Railway Dep't, Westinghouse Electric Co., Pittsburgh, Pa.	May 24, 1887
HARRINGTON, WALTER E.	Managing Electrician, Atlantic City Electric Railway, Atlantic City, N. J.	Mar. 17, 1891
HART, FRANCIS R.	Supt. of Construction, Mass. Electrical Engineering Co., 4 P. O. Square, Boston, Mass.	April 21, 1891

Name.	Address.	Date of Election
HARVEY, WIRT B.	43½ Madison St., Memphis, Tenn.	Dec. 6, 1887
* HASKINS, CARYL D.	Electrician, Thomson-Houston Electric Co., Lynn, Mass.	Mar. 18, 1890
HASSON, W. F. C.	Assistant Engineer, U. S. N. Instructor, Johns Hopkins University. Baltimore, Md.	Mar. 18, 1890
HATZEL, J. C.	Electrical Engineer and Contractor, 29 West Twenty-sixth St., New York.	Sept. 3, 1889
HALSEY, WILLIAM B.	Inspector, Postal Telegraph-Cable Co., 94 Leonard St., New York.	Mar. 18, 1890
HEILMAN, DONALD B.	243 South 5th St., Reading, Pa.	Mar. 18, 1890
HEINRICH, RICHARD O.	Demonstrator in Electrical Engineering and Physics, Lehigh University, South Bethlehem, Pa.	Oct. 1, 1889
HENDERSON, ALBERT H.	Ries and Henderson, 45 Chamber of Commerce, Baltimore, Md.	July 12, 1887
HENRY, JOHN C.	Electrical Engineer, 114 E. 54th St., New York City.	April 21, 1891
HENSHAW, FREDERICK V.	Assistant Electrician, The "C.& C." Electric Motor Co., 402 Greenwich St , New York.	Feb. 5, 1889
HERING, HERMAN S.	Professor of Applied Electricity, Phila. Manual Training School, 553 No. 16th St., Philadelphia, Pa.	April 21, 1891
HERRICK, CHARLES H.	Manager and Electrical Engineer, Wright Electrical Engineering Co. Co , 196 Summer St., Boston, Mass.	April 21, 1891
HEWITT, CHARLES	The Edison General Electric Co., Edison Building, Broad St., Box 3067, New York City.	Sept. 16. 1890
HOCHHAUSEN, WILLIAM	Electrician, The Excelsior Electric Co , 196 Willoughby St., Brooklyn, N. Y.	April 15, 1884
HOFFMAN, SAMUEL V.	Post-graduate Student, Johns Hopkins University, Baltimore, Md.	Jan. 20, 1891
HOLCOMB, EUGENE R.	Electrician, Agency Thomson-Houston Electric Co., 234 Montgomery St., San Francisco, Cal.	June 17, 1890
HOLMES, FRANKLIN S.	Electrical Engineer, with C. H. Davis, 120 Broadway, N. Y., 445a Macon St., Brooklyn, N. Y.	April 21, 1891
HOLT, MARMADUKE BURRELL.	Aspen Mining and Smelting Co., Aspen, Col.	April 15, 1890
HOPKINS, J. HERBERT	403 North 8th St., St. Louis, Mo.	April 2, 1889
HOWSON, HUBERT	Patent Lawyer, 38 Park Row, New York.	June 8, 1887
HUBRECHT, DR. H. F. R.	Director, Nederlandsche Bell Telephone Co., Amsterdam, Holland.	Oct. 4, 1887
HUMPHREYS, C. J. R.	Manager, Lawrence Gas Co., Lawrence, Mass.	Sept. 6, 1887

Name.	Address.	Date of Election.
IDELL, FRANK E.	Mechanical Engineer, 41 Dey St., New York.	July 12, 1887
IHLDER, JOHN D.	Electrical Engineer, with Osterheld & Eickemeyer, Manuf'rs of Dynamos and Motors, Yonkers, N. Y.	Oct. 2, 1888
INSULL, SAMUEL	Electrical Manufacturer, 44 Wall St., New York.	Dec. 7, 1886
ISELIN, HENRY S.	President, Gibson Electric Co., 74 Cortlandt St., New York.	June 2, 1885
IVES, EDWARD B.	Lieutenant U. S. A., Electrical Engineer, 47 Barclay St., Residence, One hundred and thirty-ninth St. and Grand Boulevard, New York.	April 2, 1889
IZARD, E. M.	Electrical Engineer, The Electrical Engineering Co., 320 Dearborn St., Chicago, Ill.	Mar. 5, 1889
JACKSON, C. H.	President, United Electric Light and Power Co., 59 Liberty St., New York.	May 24, 1887
JAEGER, H. J. **	Chemical, Physical and Electrical Glass Blowing, 173 Pearl St., Brooklyn, N. Y.	July 12, 1887
JOHNSTON, A. LANGSTAFF	Civil and Consulting Engineer in the the General Construction of Electric Railways. 1105 E. Main St., Richmond Va.	April 21, 1891
JOHNSTON, W. J.	President. The W. J. Johnston Co., Ltd., Times Building, P. O. Box 3332, N. Y.	April 15, 1884
JONES, F. R.	University of Tennessee, Knoxville, Tenn.	May 20, 1890
JONES, SEBASTIAN C. **	Electrical Engineer, Aurora, N. Y.	Sept. 6, 1887
JUDSON, WM. PIERSON,	U. S. Civil Engineer, Oswego, N. Y.	June 8, 1887
KEEN, WILLIAM M. B. *M.D.*	85 Varick Street, New York City.	Sept. 16, 1890
KENNELLY, A. E.	Electrician, Edison Laboratory, Orange, N. J.	May 1. 1888
KERR, THOMAS B.	Attorney-at-Law, 120 Broadway New York.	Nov. 1, 1887
KIMBALL, A. S.	Professor of Physics, Worcester Polytechnic Institute, Worcester, Mass.	Sept. 3, 1889
KINNEY, H. A.	Representative Brush Electric Co., N. Y. Life Ins. Building. Omaha, Neb.	Mar. 18, 1890
KNAPP, ALLAN C. *	Electrician, 225 Dearborn St., Chicago, Ill.	Sept. 6, 1887
KREIDLER, W. A.	Editor and Publisher, *Western Electrician*, 6 Lakeside Building, Chicago, Ill.	Oct. 4, 1887
LAIN, DAVID E., *B. S.*	Electrical Engineer, Yonkers, N. Y.	Nov. 13, 1888

Name.	Address.	Date of Election.
LAUDY, LOUIS H.	Assistant in Applied Chemistry, School of Mines, Columbia College, New York City, Residence, 239 West 52d St.	Feb. 24, 1891
LAW, MYRON D.	Manager Arc Light Dep't., Edison Machine Works, Schenectady, N. Y.	Feb. 7, 1888
LEDOUX, A. R.	Chemical Expert, 10 Cedar St., New York.	Dec. 7, 1886
LEE, HUNTINGTON	Pittsfield, Mass.	Dec. 3, 1889
LEE, JOHN C.	Chemist and Electrician, American Bell Telephone Co., Mountfort St., Longwood, Brookline, Mass.	Mar. 18, 1890
LELAND, H. W. ***	Manager, Telephone Exchange, 259 Washington St., Jersey City, N. J.	April 15, 1884
LEMP, HERMANN, JR.	Electrician, Thomson Electric Welding Co., Lynn, Mass.	April 2, 1889
LEVY, ARTHUR B.	Assistant Engineer, Arc Light Dep't, Edison General Electric Co., 235 E. 50th St., N. Y. C.	Jan. 20, 1891
LEWIS, HENRY FREDERICK WILLIAM,	General Manager and Secretary of the Western Counties South Wales Telephone Co., England, 8 Meridian Road, Redland, Bristol, Eng.	Mar. 5, 1889
LIEBIG, GUSTAV A., JR.	Elec'l Testing Bureau, Johns Hopkins University, Baltimore, Md.	Mar. 6, 1888
LLOYD, ROBERT MCA.	Electrician of the Marion, N. J. Factory, United Electric Traction Traction Co., 2 W. 36th St., New York City.	Oct. 21, 1890
LOGAN, CHARLES H.	General Manager, Standard Electric Co., Detroit, Mich.	Nov. 18, 1890
LOOMIS, OSBORN P.	Electrician, Eureka Electric Co., 530 Nostrand Ave., Brooklyn, N.Y.	Sept. 16, 1890
LOVEJOY, J. R.	Electrical Engineer, Thomson-Houston Electric Co., 620 Atlantic Ave., Boston, Mass.	April 21, 1891
LOWREY, GROSVENOR P.	Lawyer, 15 Broad St., Residence 121 Madison Ave., New York.	Nov. 1, 1887
LOZIER, ROBERT T. E.	Electrical Expert, The Edison General Electric Co., Broad Street, Box 3067, New York.	May 20, 1890
LUFKIN, HARVEY L.	General Agent, "C & C" Electric Motor Co, 404 Greenwich St., New York.	June 17, 1890
LUNDELL, ROBERT	Designing Draftsman, 1309 Bedford Ave., Brooklyn, N. Y.	Feb. 7, 1890
MACLILIE, C. H. *	Broker in Electrical Securities, 11 Wall St., New York.	July 12, 1887
MAC QUESTEN, W. D.	Electrical Engineer and Contractor, 15 Cortlandt St., New York.	April 15, 1890
MADDEN, O. E.	President, Empire City Electric Co., 15 Dey St., New York.	April 15, 1884

Name.	Address.	Date of Election.
MAGEE, LOUIS J.	Electrical Engineer, in charge of European Office of Thomson-Houston International Electric Co., Michaelisbrücke 1, Hamburg, Gy.	April 2, 1889
MALCOLM, PHILIP S.	Western Agent, Gibson Electric Co., Portland, Oregon.	Mar. 18, 1890
MANSFIELD, GEO. W.	Electrical Engineer, with Thomson-Houston Electric Co., 620 Atlantic Ave., Boston, Mass.	June 2, 1885
MARKS, LOUIS B.	Washington Carbon Co., Washington, Pa.	May 20, 1890
MARTIN, F.	Inspector of Isolated Plants, Edison Electric Illuminating Co., of N. Y. 16 Oak St., Newark, N. J.	Oct. 21, 1890
MARTIN, J.	Electrician, Hanson, Van Winkle & Co., 16 Oak St., Newark, N. J.	Oct. 21, 1890
MARTIN, T. COMMERFORD	(*Past President.*) Editor, *The Electrical Engineer*, 150 Broadway, New York.	April 15, 1884
MASON, AUGUSTE F.	General Manager, Simplex Electric Co , 620 Atlantic Avenue, Boston, Mass.	June 17, 1890
MAYER, GEORGE	Mechanical Draughtsman, Edison General Electric Co., 68 Broad St., New York City.	Dec. 16, 1890
MCCAY, H. K.	Electrician, Consolidated Electric Co. Amsterdam, N. Y.	Sept. 16, 1890
MCKIBBIN, GEORGE N.	Chemist and Electrician, 46 West Fifty-first St., New York.	June 8, 1887
MCKINSTRY, J. P.	185 Seneca St., Cleveland, O.	April 15, 1884
MCMAHAN, JOHN M.	Bergen Point, N. J.	Aug. 6, 1889
† MERCER, ANDREW G.	Treasurer and Electrician, Waterloo Electric Co., Waterloo, N. Y.	Sept. 3, 1889
MERRITT, ERNEST	Instructor in Physics, Cornell University, Ithaca, N. Y.	Sept. 16, 1890
MILLER, JOSEPH A.	Civil and Consulting Engineer, Providence, R. I.	Dec. , 1884
MILLER, WM. C.	General Manager, Watervliet Turnpike & R. R. Co., 3 South Hawk Street, Albany, N. Y.	Oct. 21, 1890
MINER, W. M.	Electrician and Inventor, 89 East Second St., Plainfield, N. J.	July 12, 1887
MITCHELL, JOHN MURRAY	Lawyer, Box 3712, 45 Wall St., New York.	June 2, 1885
MITCHELL, SIDNEY Z.	Manager, Oregon, Washington and Idaho Agency, Edison General Electric Co., Washington Building, Portland, Or.	Nov. 12, 1889
MIX, EDGAR W.	Electrician, with Thomson-Houston Electric Co., Lynn, Mass.	Sept. 3, 1889
MOORE, JOHN J.	425 E. Twenty-fourth St , New York.	Nov. 12, 1889
MORRISON, J. FRANK	15 South St., Baltimore, Md.	April 15, 1884

Name.	Address.	Date of Election.
MORTON, HENRY, *Ph. D*	President of Stevens Institute of Technology, Hoboken, N. J.	May 24, 1887
MOSES, DR. OTTO A.	Electrician, 131 East Seventy-third St., New York.	May 17, 1887
MOSS, GEO. W.	Station Manager, C. & S. A. Tel. Co., Tehuantepec, Mexico.	Jan. 7, 1890
MOSSCROP, WM. A.	Sup't of Construction, Woodbridge & Turner, Room 44, The Brevoort, Brooklyn, N. Y.	May 7, 1889
MURPHY, WM. F.	Chattanooga, Tenn.	Dec. 16, 1890
MYERS, GEO. FRANCIS	Post-Graduate Student, Cornell University, 69 Heustis St., Ithaca, N. Y.	June 17, 1890
NESMITH, S. D.	Ohio Agent, Edison General Electric Co., 322 Society for Savings Building, Cleveland, O.	Sept. 16, 1890
NEWELL, ARTHUR J,	Electrical Engineer, R. T. Oakes & Co., 184 Beech St., Holyoke, Mass.	Mar. 18, 1890
NICHOLLS, F. VICTOR	Electrician and Manager Vancouver Electric Illuminating Co., Vancouver, B. C.	Dec. 4, 1888
NICHOLS, ARTHUR E.	Student in Electrical Engineering, Columbia College, 16 E. 35th St., New York City.	Mar 18, 1890
NUNN, RICHARD J., *M. D.*	Physician, 1194 York St., Savannah Ga.	July 12, 1887
OCKERSHAUSEN, H. A.	Electrical Engineer, 65 Madison Ave., Jersey City, N. J.	Sept. 6, 1887
O'DEA, M.	Electrician, University of Notre Dame, Notre Dame, Ind.	June 8, 1887
OTTEN, DR. JAN D.	Engineer, Thomson-Houston International Electric Co., Michaelsbrucke 1, Hamburg, Germany.	Nov. 18, 1889
OWENS, R. B.	Superintendent, Greenwich Gas and Electric Light Co., Greenwich, Conn.	June 17, 1890
PAINE, F. B. H.	Consulting Electrical Engineer, Chas Paine & Sons, 71 Broadway, New York City.	Dec. 16, 1890
PALMER, G W., JR.	General Manager, McKeesport Light Co., McKeesport, Pa.	April 15, 1890
PARSELL, HENRY V., JR.	31 East Twenty-first St., New York.	Nov. 12, 1889
PAUL, CHAS. M.	Electrician. Care of Weston Electrical Instrument Co., 645 High St. Newark, N. J.	May 7, 1889
PECK, EDWARD F.	General Sup't Citizens Electric Illuminating Co., Cor. Navy St. and DeKalb Ave., Brooklyn, N. Y.	May 20, 1890
PECK, SAMUEL C.	Electrician, Thomson-Houston Electric Co., 620 Atlantic Ave, Boston, Mass.	Sept 6, 1887
PEIRCE, WM. H.	Electrical Engineer, 1028 McCulloh St., Baltimore, Md.	Sept. 7, 1888

Name.	Address.	Date of Election.
PERKINS, FRANK C,	Student in Electrical Engineering, Cornell University, Ithaca, N. Y.	Oct. 21, 1890
PHELPS, GEO. M.	(*Treasurer*). President, *Electrical Engineer*, 150 Broadway, New York.	April 15, 1884
PHILLIPS, EUGENE F.	M'f'r Insulated Electric Wire, Providence, R. I.	July 13, 1889
POOLE, CECIL P.	Contracting Electrical Engineer, 206-8 Eighth St. Lynchburg, Va.	Jan. 3, 1888
POOR. CHAS. LANE	Tutor, College of the City of New York, 17 Lexington Ave., New York City.	Dec. 16, 1890
PUPIN, DR. MICHAEL I.	Instructor in Mathematical Physics, Columbia College, 68 W. 72d St., New York City.	Mar. 18, 1890
POPE, RALPH W.	Secretary of the American Institute of Electrical Engineers, 12 W. 31st St., Editor *Electric Power*, 136 Liberty St., New York. Residence, 570 Cherry St., Elizabeth, N. J.	June 2, 1885
POWELL, WILLIAM H.	Flushing and College Point Railway, Flushing, N. Y.	June 17, 1890
PUTNAM, H. ST. CLAIR	Treasurer and Electrician, Thomson-Houston Carbon Co., Fremont, O.	Sept. 16, 1890
RAE, FRANK B.	Electrical Engineer. Detroit Electrical Works, Detroit, Mich.	April 15, 1884
RANDALL, JOHN E.	Incandescent Lamp Dep't, Thomson-Houston Electric Co., Lynn, Mass.	May 7, 1889
REED, CHAS. J.	Electrician, 224 High St., Orange, N. J.	Mar. 5, 1889
REED, HENRY A.	Secretary and Manager, Bishop Gutta-Percha Co., 422 East Twenty-fifth St., New York.	June 4, 1889
REID, THORBURN	Edison General Electric Co., 44 Broad Street, and 26 E. 33d St., New York City.	Oct. 21, 1890
REILLY, JOHN C.	General Sup't, N. Y. & N. J. Tel Co., 16 Smith St , Brooklyn, N. Y.	April 15, 1884
REINMANN, A. L.	Electrician, 510 W. 23d St., New York City.	June 8, 1887
REIST, H. G.	Electrical Engineer, Thomson-Houston Electric Co., 113 Franklin St., Lynn, Mass.	June 17, 1890
RIKER, ANDREW L.	Electrical Engineer. 15 East Fifty-fifth St., New York.	Nov. 1, 1887
ROBINSON, ALMON,	Draughtsman, Expert in Methods of Gearing, P. O. Box, 943, Lewiston, Me.	Sept. 6, 1887
RODMAN, SAMUEL, JR.	Lieut. 1st Artillery, U. S. A., Fort Adams, Newport R, I.	Sept. 16, 1890
ROEBLING, FERDINAND W.	Manufacturer of Electrical Wires and Cables, Trenton, N. J.	June 8, 1887

Name.	Address.	Date of Election.
ROESSLER, S. W.	Captain, U. S. A., U. S. Engineer Office, Memphis, Tenn.	Dec. 3, 1889
ROGERS, WINFIELD S.	Mechanical Engineer, Estate of F. W. Richardson, Troy, N. Y.	Sept. 3, 1889
ROOME, H. C.	32 Liberty St., New York.	April 15, 1884
ROSENBAUM, WM. A.	Electrical and Patent Solicitor, Care of *The Electrical World*, Times Building, New York.	Jan. 3, 1889
ROSENBERG, E. M.	Supt. Manhattan E. L. Co., 80th St., and Ave. B. Residence, 784 Lexington Ave., N. Y. City.	Oct. 21, 1890
ROYCE, FRED W.	Electrician and Patent Solicitor, 1408 Pennsylvania Ave., Washington D. C.	April 15, 1884
RYAN, HARRIS J.	Professor of Electrical Engineering, Cornell University, Ithaca, N. Y.	Oct. 4, 1887
SARGENT, W. D.	General Manager, N. Y. & N. J. Tel. Co., 16 Smith St., Brooklyn, N. Y.	April 15, 1884
SAWYER, FREDERICK J.	381 Boylston St., Boston, Mass.	June 8, 1887
SAXELBY, FREDERICK,	Electrical Engineer, 416 Jersey St., Harrison, N. J.	June 5, 1888
SCHMID, ALBERT	Superintendent, Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.	Oct. 21, 1890
SCHMIDT, FREDERICK,	Managing Director, The Schmidt-Douglas Electric Co., L'td., 31 Blenheim Rd., Bradford, England.	Jan. 3, 1888
SCHMIDT, GIACOMO	Ass't General Manager, Richmond Light, Heat and Power Co., New Brighton, N. Y.	April 21, 1891
SEARING, LEWIS	Thomas, Shepard & Searing, 69 Arapahoe Building, Denver, Colorado.	April 3, 1888
SEELY, J. A.	General Manager, Complete Construction Co., 24 Cortlandt St., New York.	April 15, 1884
SERRELL, LEMUEL WM.	Mechanical and Electrical Engineer, 115 Broadway, New York.	Nov. 1, 1887
SHAW, GEORGE B.	General Manager, National Electric Mfg. Co., Eau Claire, Wis.	April 15, 1890
SHEBLE, FRANKLIN	Electrical Engineer, Thomson-Houston Electric Co., Lynn, Mass.	Oct. 21, 1890
SHEEHY, ROBERT J.	Electrical Engineer, Equitable Mfg. and Electric Co., 24 West St. and 101 W. 76th St., N. Y. C.	April 21, 1891
SHEEHAN, WILLIAM M.	Manager and Electrician, Newburgh Electric Light & Power Co., 65 Montgomery St., Newburgh, N.Y.	Sept. 3, 1889
SHELDON, SAMUEL, *A. M. Ph. D.*	Professor of Physics and Electrical Engineering, Polytechnic Institute, Brooklyn, N. Y., Residence, 20 Sidney Place.	Dec. 16, 1890

Name.	Address	Date of Election.
SHEPARDSON, GEORGE D.	Instructor in Physics, Cornell University, Ithaca, N. Y.	April 21, 1891
SINCLAIR, H. A.	Electrical Engineer. The Tucker Electric Co., 950 Bedford Ave., Brooklyn, N. Y.	June 17, 1890
SISE, CHARLES F.	Vice-President and Managing Director, Bell Telephone Co., of Canada, and Canadian Telephone Co., Ltd., Montreal, Canada.	June 8, 1887
SMITH, FREDERICK H.	Civil Engineer. 227 East German St., Baltimore, Md.	Nov. 12, 1889
SMITH, GERRITT	Circuit Electrician, 195 Broadway, P. O. Box 3393, New York.	April 15, 1884
SMITH, J. ELLIOT	Superintendent Fire Alarm Telegraph, 157 East Sixty-seventh St., New York.	April 15, 1880
SMITH, JESSE M.	Consulting Electrical Engineer and Expert in Patent Causes, 36 Moffatt Block, Detroit, Mich.	April 15, 1884
SOUZA, CARLOS MONTEIRO e	Rio de Janeiro, Brazil.	Sept. 6, 1887
SPAULDING, HOLLON C.	Sec'y, Thomson-Van Depoele Electric Mining Co., 620 Atlantic Ave., Boston, Mass.	April 21, 1891
SPICER, CHAS. W. W.	122 West 21st. St., New York City.	Nov. 12, 1889
SPIKE, CLARENCE J.	Halifax, N. S.	Mar. 18, 1890
SPRAGUE, FRANK J.	(*Vice-President.*) Electrical Engineer and Inventor, 277 West 73d St., New York.	May 24, 1887
SPRUSON, WILFRED J.	Member of the firm of Hepburn & Spruson, Consulting Engineers and Electricians, 169 King St., Sydney, Australia.	Dec. 16. 1890
STADELMAN, WM. A.	Vice-Prest. and Chief Engineer, Equitable Elec. Ry. Construction Co., 418 Walnut St., Philadelphia, Pa.	Feb. 7, 1890
STANLEY, WILLIAM, JR.	Electrician, Pittsfield, Mass.	Dec. 6, 1887
STEARNS, CHARLES K.	Sup't of Construction, N. W. Thomson-Houston Electric Co., 403 Sibley St., St. Paul, Minn.	Aug. 6, 1889
STOCKBRIDGE, GEO. H.	Patent Attorney, and Editor *Electric Power*. 136 Liberty St., New York.	May 24, 1887
STOCKLY, GEO. W.	President, Brush Electric Co., Cleveland, O.	April 15, 1884
STOREY, IMLE E.	Electrician and Manager, Storey Electric Drill and Power Co., 16 Broad St., New York City.	May 20, 1890
STUART, OTIS K.	Clerk, Thomson Electric Welding Co., Lynn, Mass.	June 4, 1889
STUMP, CLARENCE E.	Vice-President and Business Manager, Street Railway Publishing Co., World Building, New York.	May 17, 1887

Name.	Address.	Date of Electio
SULLIVAN, M. C.	With the *Electrical Engineer*, 150 Broadway, New York City.	Dec. 16, 1890
SWEET, HENRY N.	Chief of Patent Bureau, Thomson Electric Welding Co., 89 State St., Boston, Mass.	May 20, 1890
TABER, ROBERT B.	Secretary and Electrical Engineer, New Bedford Gas Light Co., New Bedford, Mass,	Sept. 16, 1890
TALTAVALL, THOS. R.	Editor, *Electrical Age*, World Building, New York City.	Jan. 20, 1891
TAYLOR, CHARLES	Metallurgist, U. S. Assay Office, 30 Wall St., New York.	Nov. 1, 1887
TEMPLE, WILLIAM CHASE	Mechanical and Electrical Engineer, Lewis Block, P. O. Box 800 Pittsburgh, Pa.	May 3, 1887
TESLA, NIKOLA	Electrical Engineer and Inventor, The Gerlach, 55 West 27th St., New York.	June 5, 1888
THOMPSON, ALEXANDER	Supt. Electrical Dept., and Chief Engineer, Superior Water, Light and Power Co., West Superior, Wis.	April 21, 1891
THOMPSON, WILLIAM GEO.	MACNEILL, Resident Engineer, Sault Ste. Marie Canal, Sault Ste. Marie, Ontario.	July 12, 1887
TOBEY, WILLIAM BOARDMAN	Pittsfield Electric Light & Power Co., Pittsfield, Mass.	Sept. 16, 1890
TOTTINGHAM, F. M.	Supt. 2nd. District, Edison Electric Ill. Co., 49 W. 26th St., New York City.	APril 21, 1891
TOWNSEND, HENRY C.	(*Manager*). Attorney and Expert in Electrical Cases, 5 Beekman St., New York.	July 10, 1888
TREGONING, JOHN	Sup't, Thomson Electric Welding Co., 325 Boston St , Lynn, Mass.	April 2, 1889
TROTT, A. H. HARDY	Electrical Expert, with Thomson-Houston Electric Co., Lynn. Mass.	Jan. 20, 1891
TUTTLE, GEORGE W.	Storekeeper, Sawyer-Man Electric Co., 510 West 23d St., New York City.	Mar. 17, 1891
UEBELACKER, CHAS. F.	Brush Electric Co., and 1299 Euclid Ave., Cleveland Ohio.	Feb. 7. 1890
UHLENHAUT, FRITZ, JR.	Field Engineering Co., 15 Cortlandt St., New York.	May 7, 1889
UPTON, FRANCIS R.	(*Manager*). Treasurer and General Manager, Edison Lamp Co., Harrison, N. J.	May 17, 1887
VAIL, THEO. N.	President, Metropolitan Telephone & Telegraph Co., 18 Cortlandt St., New York.	April 15, 1884
VARLEY, RICHARD, JR.	Electrician, Okonite Insulated Wire Co., Passaic, N. J.	Mar. 18, 1890
VAN BRUNT, WALTER	Manager, Duluth Telephone Co., Duluth, Minn.	Sept. 6, 1887

Name.	Address.	Date of Election.
VANCE, A. ST. CLAIR	Edison General Electric Co., Broad St., Box 3067, New York City.	April 2, 1889
VAN TRUMP, C. REGINALD	Wilmington City Electric Co., Wilmington, Del.	Feb. 5, 1889
VAN VALKENBURGH, F. S.	Central and South American Tel. Co., Tehuantepec, Mexico.	June 5, 1886
VAN VLECK, FRANK	Executive Engineer, Pacific Railway Co., Los Angeles, Cal.	Nov. 16, 1886
VAN WYCK, PHILIP V. R., JR.	36 W. 12th St., New York City.	April 21, 1891
VIDUARRE, JOSE	Dealer in Electrical Supplies, Ponce, Porto Rico.	Sept. 6, 1887
WACKER, GEORGE G.	Electric Organs, 3644 Third Ave., New York.	Sept. 6, 1887
WALLACE, WILLIAM	Wire Manufacturer, Ansonia, Conn.	April 15, 1884
WALTER, HENRY E.	Schenectady, N. Y.	April 2, 1889
WARDELL, GEORGE P.	19 Cedar St., Newark, N. J.	Nov 12, 1889
WARING, RICHARD S.	205 Penn Building, Pittsburgh, Pa.	April 15. 1884
WARING, JOHN	Consulting Electrician, The Perkins Electric Lamp Co., Manchester, Conn.	Dec. 16, 1890
WATERHOUSE, FRANK G.	Room 6, No. 302 Asylum St., Hartford, Conn.	Sept. 6 1887
WATERS, EDWARD G.	Electrical Engineer. Thomson-Houston Electric Co , 620 Atlantic Ave., Boston, Mass.	Mar. 18, 1890
WATSON, ROBERT	The Elektron M'f'g. Co., 79 Washington St., Brooklyn, N. Y.	Oct. 21, 1890
WATTS, H. FRANKLIN.	Electrical Engineer, 355 West 14th St., New York City	May 20, 1890
WEBSTER, EDWIN S.	Mass. Electric Engineering Co., 4 P. O. Square. Boston, Mass.	April 21, 1891
WELLES, FRANCIS R.	Manufacturer, Bell Telephone Manufacturing Co., Antwerp, Belgium	Sept. 6, 1887
WELLER, HARRY W.	Railroad Inspector, The Edison General Electric Co., Edison Building, Broad Street, and Jamaica, N. Y.	Oct. 21, 1890
WHITE, H. C.	Manager, Phœnix Iron Works Co., 15 Cortlandt St., New York.	April 15, 1884
WHITE, J. G.	J. G. White & Co., Electrical Engineers and Contractors, 50 Broadway New York City.	April 2, 1889
WHITE, WILL F.	Electrical Engineer. Sec'y and Treas. Western Engineering Co., 448 Bee Building, Omaha, Neb.	Feb. 7, 1890
WHITMORE, W. G.	Electrical Engineer, Edison General Electric Co., Edison Building, Box 3067, N. Y. C.	Mar. 18, 1890
WHITNEY, HENRY M.	President, West End Street Railway Co., 81 Milk St., Boston, Mass.	July 12, 1887

Name	Address	Date of Election.
WIGHTMAN, MERLE J.	Vice-President and Electrician, The Wightman Elec. Mfg. Co., 4 Commonwealth Bldg., Scranton, Pa.	Mar. 5, 1889
WILEY, WM. H.	Scientific Expert, 53 East 10th St., New York.	Feb. 7, 1888
WILLIAMS, ARTHUR S.	Electrician, American Telephone and Telegraph Co., 18 Cortlandt St., New York City.	May 20, 1890
WILLIAMS, CHARLES, JR.	Electrician, 100 Sudbury St., Boston, Mass.	April 15, 1884
WILLIAMS, JAMES B. *M. D.*	44 Broadway, Room 60, New York.	Sept. 7, 1888
WINKLER, CHARLES F.	Electrician, Troy Electric Dynamo Co., 4 Park Ave., Troy, N. Y.	Sept. 3, 1889
WINSLOW, I. E.	458 Produce Exchange, New York.	Nov 12, 1889
WINTRINGHAM, J. P.	Theorist, 36 Pine St., New York.	May 7, 1889
WIRT, CHARLES.	Electrical Engineer of the Electrical Supply Co., 171 Randolph St., Chicago.	Sept. 8, 1888
WOLVERTON, B. C.	Electrician, N. Y. & Pa. Telephone & Telegraph Co., Elmira, N. Y.	Mar. 18, 1890
WOOD, E. J.	Consulting Engineer and Contractor, 243 Broadway, New York.	July 12, 1887
WOODRUFF, H. O.	Des Moines, Iowa.	Oct. 2, 1888
WOOLF, ALBERT E.	Electrician and Inventor, Woolf Electrical Co., 20 Nassau St. Room 50 and 864 Lexington Ave., New York City.	Sept. 16, 1890
WORTHINGTON, GEORGE	Manager, *Electrical Review*, 13 Park Row, New York.	April 15, 1884
WRIGHT, JOHN D.	Electrician's Assistant, United Electric Traction Co., 17 East Park St., Newark, N. J.	Oct. 21, 1890
YOUNG, ALDEN M.	Contractor for Organization and Complete Equipment of Electric Lighting Plants, 101 Bank St., Waterbury, Conn.	Sept. 6, 1887
ZALINSKI, EDMUND L.	Captain of Artillery, U. S. A., Care of War Dept., Washington, D. C.	May 17, 1887

Associate Members, - - - 377.

SUMMARY.

Honorary Members, - - - - - - - - -	3
Members, - - - - - - - - - - -	161
Associate Members. - - - - - - - - -	377
Total - - - - -	541

OFFICIAL STENOGRAPHER.

RYAN, RICHARD W., 300 Mulberry St., New York City.

AMERICAN INSTITUTE

OF

ELECTRICAL ENGINEERS.

RULES

ADOPTED MAY 13, 1884. AMENDED DECEMBER 8, 1885.

EXECUTIVE OFFICES:

12 West 31st St.,

NEW YORK CITY,

1891.

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RULES.

I.

OBJECTS.

THE objects of the AMERICAN INSTITUTE of ELECTRICAL ENGINEERS are to promote the Arts and Sciences connected with the production and utilization of electricity, and the welfare of those employed in these industries; by means of meetings for social intercourse, the reading and discussion of professional papers, and the circulation, by means of publications among its members and associates, of the information thus obtained.

II.

MEMBERSHIP.

The Institute shall consist of Members, Honorary Members, and Associates. Members shall be Electrical Experts, Electricians, or Electrical Engineers possessing such knowledge of the principles of Electrical science and such familiarity with the practical applications of electricity in its several branches, as those branches imply.

Honorary members shall be recommended by at least ten members or associates, and elected by the unanimous vote of the Council, but shall not be entitled to vote or serve as members of the Council.

Associate members, shall be such persons as are or have been connected with the utilization of electricity, or who by means of study or experimental investigation are qualifying themselves to become identified with electrical science, and such others to whose

admission no objection shall be made by any member of the Council.

Proposals for admission shall be endorsed by at least three members or associates, and referred to the Council, which shall have power to elect to Associate Membership only.

All members and associates shall be equally entitled to the privileges of membership.

Transfers from associate membership to membership, may be made by the Council upon application, subject to the approval of a Board of Examiners, which shall have the power from time to time to provide rules to test the qualifications of applicants. Such rules must be approved by the Council. Any person rejected by the Board shall have the right of appeal first to the Council, and finally to any meeting of the Institute.

The Board of Examiners shall consist of five members, (three of whom shall constitute a quorum), who shall be appointed by the President and approved by the Council. They may not be members of the Council, and at least three of them must reside within convenient distance of New York City,

Any member or associate may be stricken from the list by the vote of three-fourths of the members of the Council, due notice having been mailed in writing by the Secretary to the said member or associate.

III.

DUES.

The entrance fee shall be five dollars for each person. The dues of members and associates shall be ten dollars per annum, payable in advance, at the annual meeting, except that new associate members elected, shall pay in advance, *pro rata*, from the first of the month of their election until the next annual meeting. Honorary members shall not be liable to fees and dues. Any member or associate may become, by the payment of one hundred dollars at any one time, a life member or associate, and shall not be liable thereafter to annual dues. The dues of members residing in foreign countries—beyond the seas—shall be five dollars per year, but such members shall have no vote for election of members. Any member or associate in arrears may, at the discretion of the Council, be deprived of the receipt of publications, or

stricken from the list of members when in arrears for one year; *Provided*, that he may be restored to membership by the Council on payment of all arrears, or by re-election after an interval of three years.

IV.

OFFICERS.

The affairs of the Institute shall be managed by a Council, consisting of a President, six Vice-Presidents, twelve Managers, a Secretary and a Treasurer, who shall be elected from among the members and associates of the Institute at the annual meetings, to hold office as follows:

The President, the Secretary, and the Treasurer for one year (and no person shall be eligible for immediate re-election as President, who shall have held that office subsequent to the adoption of these rules, for two consecutive years), the Vice-Presidents for two years, and the Managers for three years; and no Vice-President or Manager shall be eligible for immediate re-election to the same office at the expiration of the term for which he was elected. At each annual meeting, a President, three Vice-Presidents, four Managers, a Secretary and a Treasurer shall be elected, and the term of office shall continue until the adjournment of the meeting at which their successors are elected.

At the first meeting for the election of officers, a President, three Vice-Presidents, to serve one year, three Vice-Presidents, to serve two years, four Managers, to serve one year, four Managers, to serve two years, four Managers, to serve three years, a Treasurer, to serve one year, and a Secretary, to serve one year, shall be elected.

The duties of all officers shall be such as usually pertain to their offices, or may be delegated to them by the Council or the Institute; and the Council may in its discretion require bonds to be given by the Treasurer. At each annual meeting the Council shall make a report of proceedings to the Institute, together with a financial statement.

Vacancies in the Council may occur by death or resignation; or the Council may by a vote of the majority of all its members, declare the place of any officer vacant, on his failure for one year, from inability or otherwise, to attend the Council meetings or to

perform the duties of his office. All vacancies shall be filled by the appointment of the Council, and any person so appointed shall hold office for the remainder of the term for which his predecessor was elected or appointed; *Provided*, that the said appointment shall not render him ineligible at the next annual meeting.

Five members of the Council shall constitute a quorum; but the Council may appoint an Executive Committee, or business may be transacted at a regularly called meeting of the Council, at which less than a quorum is present, subject to the approval of a majority of the Council, subsequently given in writing to the Secretary, and recorded by him with the minutes.

V.

ELECTIONS.

The annual election shall be held in the city of New York, on the third Tuesday in May of each year. Nominations for officers may be made in writing to the Secretary at any time previous to the meeting, but the votes shall be by ballots deposited only by members actually present. *Provided*, that no member or associate in arrears since the last annual meeting shall be allowed to vote until the said arrears shall have been paid. If for any reason it is deemed proper to postpone the election, it may be adjourned from day to day with the consent of two-thirds present or voting.

VI.

MEETINGS.

The annual meeting of the Institute shall take place on the third Tuesday of May, at which a report of the proceedings of the Institute, and an abstract of the accounts shall be furnished by the Council. Two other regular meetings of the Institute shall be held in each year, at such times and places as the Council shall select, and notice of all meetings shall be given by mail, or otherwise, to all members and associates, at least twenty days in advance. Special meetings may be called whenever the Council sees fit; and the Secretary shall call a special meeting on a requisition signed by fifteen or more members. The notices for spec

ial meetings shall state the business to be transacted, and no other, shall be entertained.

Every question which shall come before any meeting of the Institute shall be decided, unless otherwise provided by these Rules, by the votes of a majority of the members then present. Any member or associate may introduce a stranger to any meeting, but the latter shall not take part in the proceedings without the consent of the meeting.

VII.

PAPERS.

The Council shall have power to decide on the propriety of communicating to the Institute any papers which may be received, and they shall be at liberty, when they think it desirable, to direct that any paper read before the Institute, shall be printed in the Transactions. Intimation, when practicable, shall be given, at each general meeting of the subject of the paper or papers to be read, and of the questions for discussion at the next meeting. The reading of papers shall not be delayed beyond such hour as the presiding officer shall think proper; and the election of members or other business may be adjourned by the presiding officer, to permit the reading and discussion of papers.

The copyright of all papers communicated to, and accepted by, the Institute, shall be vested in it, unless otherwise agreed between the Council and the author. The author of each paper read before the Institute shall be entitled to twelve copies, if printed, for his own use, and shall have the right to order any number of copies at the cost of paper and printing, provided said copies are not intended for sale. The Institute is not, as a body, responsible for the statements of fact or opinion advanced in papers or discussions at its meetings, and it is understood that papers and discussions should not include matters relating to politics or purely to trade.

VIII.

AMENDMENTS.

These Rules may be amended at any regular meeting by a two-third vote of the members present, provided that written notice of the proposed amendment shall have been given at a previous meeting.

STATE OF NEW YORK.
CITY AND COUNTY OF NEW YORK. } ss.

I, Sidney F. Shelbourne, having been appointed a committee of one at a meeting of the American Institute of Electrical Engineers, held in the City of New York, on the 8th day of December, 1885, to supervise and attend to the correct engrossing and embodiment into the Rules of the Institute, of the amendments thereto, adopted at said meeting, do hereby certify that the foregoing Rules, as printed, correctly contain under their several divisions the said amendments and the whole thereof, as adopted at said meeting.

Dated New York City,
The 27th day of January, 1886.

SIDNEY F. SHELBOURNE.

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UNDERGROUND ELECTRICAL SYSTEMS. By Sidney F. Shelbourne.—THE GREAT TANGENT GALVANOMETER OF THE CORNELL UNIVERSITY. Prof. W. A. Anthony, now of Manchester, Conn.—SOME RECENT ADVANCES IN TELEPHONY. (Illustrated.) Thomas D. Lockwood, of Boston, Mass.—THE PATENT OFFICE AND PATENT OFFICE PRACTICE. A. C. Fowler, of New York.—GENERIC DIFFICULTIES IN TELEGRAPH WIRES. F. W. Jones of New York. Containing a Synopsis, with reference to 115 American and Foreign Patents for Inventions intended to overcome these difficulties.—SECONDARY BATTERIES FOR LIGHT AND POWER. A. H. Bauer.—THE WIRE GAUGE. Report of Committee.—NOTES ON DYNAMIC INDUCTION. Sidney F. Shelbourne.

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ELECTRIC STREET CARS. T. C. Martin, of New York.—THE PRACTICAL REQUIREMENTS OF SMALL MOTORS. S. S. Wheeler, of New York.—DESCRIPTION OF THE GRAMME ALTERNATING CURRENT GENERATOR. Discussion by F. L. Pope, Dr. Otto A. Mosse, Captain O. E. Michaelis, Prof. Elihu Thomson and others.—STORAGE BATTERIES IN PRACTICE. E. P. Roberts, of Cleveland, O.—DIFFERING TEMPERATURE COEFFICIENTS OF THE DIFFERENT COILS OF A FINE RHEOSTAT. Prof. W. A. Anthony, now of Manchester, Conn.—ON THE BEST RATIO OF THE SECTION OF THE GRAMME ARMATURE TO THE SECTION OF THE FIELD MAGNETS. (Illustrated.) Dugald C. Jackson, now of Lincoln, Neb.—NOTES: PHENOMENA OF ALTERNATING CURRENTS. (Illustrated.) Prof. Elihu Thomson, of Lynn, Mass.—A FEW COMPARATIVE STATISTICS OF ELECTRIC RAILWAYS. T. C. Martin, of New York. (With tabular statement.)—CENTRAL STATION CONSTRUCTION. J. A. Powers, of Troy, New York.—ON THE CHANGE FROM NEGATIVE TO POSITIVE OF THE TEMPERA

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ON ELECTRIC STREET CARS, WITH SPECIAL REFERENCE TO METHODS OF GEARING. Anthony Reckenzaun, of London. No. 1, October, 1887—A COULOMB METER, OR INSTRUMENT FOR MEASURING THE CONSUMPTION OF ELECTRICITY. (Illustrated.) Prof. George Forbes, F.R.S., of London. No. 2, November, 1887—RECENT IMPROVEMENTS IN APPARATUS FOR OCEAN CABLING. (Illustrated.) Charles Cuttriss. Supplementary Note on the Siphon Recorder, and Ocean Telephony, by Thos. D. Lockwood. No 3, December, 18 7—PHENOMENA OF RETARDATION IN THE INDUCTION COIL. (Illustrated.) William Stanley, Jr. No. 4, January, 1888.—REVISION OF THE PATENT LAW. Arthur Steuart, Esq. No. 5, February, 1888.—ELECTRIC ENERGY FROM CARBON WITHOUT HEAT. Willard E. Case, Auburn, N. Y. No. 6, March, 1888.—ALTERNATING CURRENT ELECTRIC MOTORS. Dr. Louis Duncan, Baltimore, Md. No. 7, April, 1888.—MAXIMUM EFFICIENCY OF INCANDESCENT LAMPS. (Illustrated.) John W. Howell. No. 8, May, 1888.—PROTECTION OF THE HUMAN BODY FROM DANGEROUS CURRENTS. Patrick B. Delany.—THE POSSIBILITIES AND LIMITATIONS OF CHEMICAL GENERATORS OF ELECTRICITY. Francis B. Crocker. No. 9, June, 1888—ON COMPENSATED RESISTANCE STANDARDS. (Illustrated:) Edward L. Nichols. A NEW SYSTEM OF ALTERNATE CURRENT MOTORS AND TRANSFORMERS. (Illustrated.) Nikola Tesla. UNDERGROUND ELECTRICAL CONDUCTORS IN EUROPE AND AMERICA. Prof. G. W. Plympton. THE PATENT COURT AND UNIFORMITY IN PATENT OFFICE PRACTICE. George H. Stockbridge. A SWINGING ARM GALVANOMETER. (Illustrated.) George S. Moler. No. 10, July, 1888. THE SOLUTION OF THE MUNICIPAL RAPID TRANSIT PROBLEM. (Illustrated.) Frank J. Sprague. No. 11, August, 1888. SOME OBJECTIONS TO THE OVERHEAD CONDUCTOR FOR ELECTRIC RAILWAYS, M. B. Leonard. NOTE ON GEARING FOR ELECTRIC RAILWAY MOTORS, Almon Robinson. No. 12, September, 1888.

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When this blank is filled out, it should be sent to R. W. Pope, Sec'y, 12 West 31st St., N.Y.

Progressive No.....

Transfer No.....

References if possible to names on the Institute list.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.

Application for Admission

Extracts from the Rules, as Amended December 8th, 1885.

MEMBERSHIP.

The Institute shall consist of Members, Honorary Members, and Associates.

Members shall be Electrical Experts, Electricians, or Electrical Engineers, possessing such knowledge of the principles of Electrical science, and such familiarity with the practical applications of electricity in its several branches as those branches imply.

Honorary Members shall be recommended by at least ten members or associates, and elected by the unanimous vote of the Council, but shall not be entitled to vote or serve as members of the Council.

Associate Members shall be such persons as are or have been connected with the utilization of electricity, or who by means of study or experimental investigation, are qualifying themselves to become identified with electrical science, and such others to whose admission no objection shall be made by any member of the Council.

Proposals for admission shall be endorsed by at least three members or associates, and referred to the council, which shall have power to elect to Associate Membership only.

All members and associates shall be equally entitled to the privileges of membership.

Transfers from associate membership to membership may be made by the Council upon application subject to the approval of a Board of Examiners, which shall have the power from time to time to provide rules to test the qualifications of applicants. Such rules must be approved by the Council. Any person rejected by the Board shall have the right of appeal first to the Council, and finally to any meeting of the Institute.

DUES.

The entrance fee shall be five dollars for each person The dues of members and associates shall be ten dollars per annum, payable in advance, at the annual meeting, except that new associate members elected, shall pay in advance *pro rata*, from the first of the month of their election until the next annual meeting. Honorary members shall not be liable to fees and dues. Any member or associate may become, by the payment of one hundred dollars at any one time, a life member or associate, and shall not be liable thereafter to annual dues The dues of members residing in foreign countries—beyond the seas—shall be five dollars per year, but such members shall have no vote for election of members.

Endorsements by signatures of members or associates

To the Council of the American Institute of Electrical Engineers.

I.....

residing at.....

and at present associated with.....

as.....

do hereby make application for admission into the American Institute of Electrical Engineers, as an **Associate Member,** with the privilege of being subsequently transferred to full membership, should my record prove satisfactory to the Board of Examiners.

Signature and address to which publications and communications should be sent. .....

.....

The Secretary will obtain these, if not convenient for the applicant.

N. B.—Should the candidate desire to be transferred from Associate to full Membership, he should fill out the blank pages on the other side of this sheet. ***He must in all cases be first elected by Council to Associate Membership, and his application subsequently submitted to the Board of Examiners.***

APPLICATION FOR TRANSFER FROM ASSOCIATE TO FULL MEMBERSHIP.

Statements of fact responsive to the following inquiries are required for the information of the Board of Examiners, and the Council, who will determine the proper classification of a duly elected Associate applying for transfer to the class of Members.

These statements may be required to be verified by the oath of the applicant, and should therefore be made with due care.

1. What is your full name; date, and place of birth?
2. What education, general and technical, have you had; where and how acquired?
3. What is and has been your employment; how long have you been so employed?
4. State any facts you may deem likely to aid in determining the question here under inquiry.
5. Refer us to any Member of this society having personal knowledge of your professional qualifications, if such there be.